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THE EDITOR

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Vol. XXXVI

JANUARY, 1921

No. 1

# SOUTHERN CALIFORNIA PRACTITIONER

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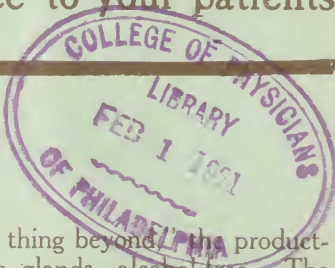
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NORMAN BRIDGE, M.D., A.M., LL.D.



# SOUTHERN CALIFORNIA PRACTITIONER

Vol. XXXVI

LOS ANGELES, JANUARY, 1921

No. 1

Editor,  
DR. GEO. E. MALSBARY.

Associate Editors,

Dr. Walter Lindley, Dr. W. W. Watkins, Dr. Ross Moore, Dr. George L. Cole,  
Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton,  
Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. C. G. Stivers,  
Dr. Olga McNeile, Dr. W. H. Dudley, Dr. J. M. Mathews.

## AUTOBIOGRAPHY OF DR. NORMAN BRIDGE\*

By WALTER LINDLEY

The great sale of the "Memoirs of Gen. U. S. Grant" and of "The Education of Henry Adams" demonstrates the avidity with which the public reads the intimate history of a fellow citizen.

This life history of Dr. Bridge, written with complete frankness by himself, is well worth reading by both young and old. He was a Vermont boy reared by worthy parents with very limited means. In speaking of his mother the doctor says: "Every step in her work, especially when it touched any foodstuff, was marked by such ardor of cleanliness as to be a continuing lesson in aseptic good house-keeping. . . . She made soap and dipped candles with equal facility and skill—the making of candles with tin molds she never liked as well—and we early dispensed with the old-fashioned candles that required the constant use of snuffers, with poor results at best, for lamps and the stearine candles of commerce. There were two of mother's

tasks that we especially enjoyed with her, the sugaring off of the maple syrup in early spring and the semi-weekly cooking of doughnuts."

Dr. Bridge's great grandfather was Col. Ebenezer Bridge of the Revolutionary Army, while his ancestry, both paternal and maternal, was of sturdy New England stock.

Vividly the author calls to view the boyhood days of the writer of these lines when he speaks of "turning the grindstone for the scythes, axes and knives. . . . the odor of the cut grass (timothy and clover) . . . In mowing, the scythe would occasionally expose a bumblebee's nest, and we would kill the bees and eat the honey."

Dr. Bridge speaks of his uncle, who was a tinsmith, which reminds me of another man who has reached distinction whose uncle was a cobbler. This "other man" is Lloyd George and it was the savings from the cobbler's bench that made it possible for him to secure an excellent education.

When the author of this volume was

\*"THE MARCHING YEARS." By Norman Bridge, A.M., M.D., LL.D. Cloth. Price \$2.50. Pages 292. Duffield & Co., N. Y., 1920. For sale by C. C. Parker, 220 South Broadway, Los Angeles.

12 years old, his father moved with the family to a prairie farm in De Kalb county, Illinois.

It is impossible to enter into the interesting details of his education and his years of uncongenial work on the farm.

In 1866 he entered the medical department of the University of Michigan. Dr. Bridge's pen pictures of Dr. Corydon L. Ford and Dr. Samuel G. Armour are true to life. They were my teachers for two years in the Long Island College Hospital.\*

"Dr. Ford was lame, and walked with a cane. He was a strikingly handsome man, used the most refined language, and was a great teacher. He taught anatomy, and amused us by a few set expressions; for instance, when he was describing an anatomical groove or foramen, he would put a probe in it and say, 'probe in it.' Some irreverent members of the class called him 'Old Probe In It,' but it was a sobriquet of affection, for everyone loved him. His ideals for the profession were a small fortune to any student who had the sense to imbibe them.

"Dr. Armour, who taught the institute of medicine (otherwise the principles of medicine), invariably read his lectures, which therefore might have been expected to seem dull; yet he was a true orator without knowing it, and the enthusiasm for him on the part of the students was boundless. When, before the end of the term, he left to deliver lectures at Long Island College Hospital, the students formed a procession and escorted him to the train."

#### As Teacher

Dr. Bridge attended his final year at the medical department of the Northwestern University, where immediately after his graduation in 1868, he was appointed assistant demonstrator of anatomy. His account of the difficulty

and danger of securing anatomical material makes us realize that medical education is today comparatively easy.

In 1870 he became professor of pathology in the Woman's Medical College and in 1872 he became professor of medicine in Rush Medical College, which position he held twenty-eight years, when he resigned and was made emeritus professor, which position he still holds in what is now the medical department of the University of Chicago.

We cannot relate here the valuable place Dr. Bridge occupied in the development of the great city of Chicago or of the civic positions he held during those years.

Owing to ill health, due to overwork, the doctor moved to Southern California in 1892. He soon regained normalcy, but decided to stay with the "bridge" that carried him safely over and remained an enthusiastic resident of Los Angeles county. Here he soon again became a leader of men.

Eugene Field and Dr. Bridge were warm personal friends and this work contains pleasant reminiscences of that popular author when in Pasadena, Los Angeles and Chicago.

One chapter is devoted to the half-dozen volumes of which Dr. Bridge is the author. I particularly recommend to the medical profession "The Penalties of Taste."

One of the most interesting chapters is the one in which Dr. Bridge describes the beginning and development of his personal and financial association with the great oil genius and multimillionaire, Edward L. Doheny. He made his first investment (\$5000) in the Mexican Petroleum Company in 1901. I must hurry over this part of the work, but we all know that the doctor became vice-president and treasurer of Mr. Doheny's companies and from being a physician

\*I remember Professor Ford's notice to me to come up for my final exam. at the Long Island College Hospital: "You are cordially invited to attend a little seance at my rooms at 8 P. M. Thursday."

of the highest standing, worth, I hazard a guess, \$75,000, he became in a few years, several times a millionaire and one of the most liberal and judicious philanthropists America has ever known. He considers that he and Mrs. Bridge hold their wealth as trustees of a fund for the benefit of humanity.

This volume does not give us data in regard to the amounts given, but the Journal of the A.M.A. says Dr. Bridge has given \$250,000 to the Throop Institute, now the California Institute of Technology, and \$100,000 to the Rush Medical College of the University of Chicago. Here in Los Angeles we know he has given large amounts to the University of Southern California and the Southwest Museum. His fellow-citizens also know that he has been a generous contributor to the Los Angeles Symphony, the Los Angeles Orphans' Home, the Hospital Association of the Lutheran Church and many other worthy causes. His gifts have no doubt reached close to three-quarters of a million.

Dr. Bridge gives due credit from time to time to his ideal helpmeet, who during the young years of professional struggle and the more advanced years of great prosperity, has ever been faithfully by his side. The influence of Mrs. Bridge is a blessing and an inspiration to the circle in which she moves.

The chapter in regard to his activi-

ties in the war is far too modest, for almost immediately after our declaration of war he was called to Washington, where he was chairman of the National Alien Enemy Relief Committee throughout the contest and until six months after the armistice. His work there was of great value to our country and he was constantly called in consultation on matters of gravest importance by leading statesmen.

This work shows how the American boy with high ideals, intelligence, industry and clean life may reach the goal at which he aims, in spite of the handicap, or shall I say the blessing, of poverty. After I think of Dr. Bridge's life and of his service to his country I realize that I can well say in the language of Tennyson:

"Dost thou look back on what hath been,

As some divinely gifted man.

Whose life in low estate began  
And on a simple village green;

Who breaks his birth's invidious bar,  
And grasps the skirts of happy chance,

And breasts the blows of circumstance,  
And grapples with his evil star;

Who makes by force his merit known,  
And lives to clutch the golden keys,  
To enforce a mighty state's decrees."

## SIMPLIFIED INFANT FEEDING IMPORTANCE IN GENERAL PRACTICE\*

By A. J. SCOTT, Jr., M.D., LOS ANGELES.

**Introduction:** The subject chosen has possibly a tiresome sound, and may seem uncalled for, but the large number of babies seen weekly in hospitals and private practice giving a history of improper feeding, or ignorant feeding makes it seem advisable to bring this up again so that the laity may be

taught properly. Most of the textbooks give such complicated mathematical formulas that unless you carry a book around with you, it is impossible to remember how to feed certain ages, and what is the best food to use. Consequently the advertised baby food companies send out to mothers carefully

\*Read before the San Bernardino County Medical Society, November 2, 1920.

prepared pamphlets with formulas worked out for various ages, advertising, of course, their own particular wares. Then we have the highly lauded and widely advertised condensed milks, especially those with a high percentage of cane sugar. These babies grow fat and look the picture of health. But you have seen the effects of bronchopneumonia and other severe infections in these cases. No resistance and the fat melts as dew in the sun.

My idea is to try to make infant feeding a simple matter, and there is no reason why a man should not comprehend the few simple rules, and apply them in practice. Help teach the laity to get away from advertised foods and go back to cow's milk, when the mother is not able to nurse from her breasts.

**Importance of Breast Feeding:** We have had demonstrated many times that the majority of mothers are able to nurse their babies if they will. Of course we must except certain cases, such as puerperal eclampsia, nephritis, tuberculosis, malignancy, etc., but assuming the average healthy woman, if she will devote herself to the task of feeding her offspring, she can do so for at least three months and possibly longer. These first three months of any infant's life are very important from a digestive standpoint. Many infants having the advantage of a start on breast milk will be able to do nicely on almost any simple modification of cow's or goat's milk, providing the milk is kept properly and is of good quality.

**Comparison Milks, Boiled and Raw, and Antiscorbutics:** Assuming that we have to start giving some artificial food, what is the best, and how prepare it? Mankind for centuries has used cow's milk or goat's milk where it is necessary, usually prepared raw, and in recent years some kind of sugar added. Primarily this was to make the milk more palatable for the infant, but nowadays we use it to bring up the calorie value of the food. In some of

the European countries the milk was boiled because of the unsanitary conditions under which it was produced, and the lack of ice for keeping it over long periods of time. In America raw milk has been used almost exclusively up to the past few years. Brennermann of Chicago, in 1913 (1), reported some experiments upon a man who could vomit easily, using in these experiments both boiled and raw milk. In a later report (2), he gives further researches along this same line upon the same individual, and others, using raw milk, top milks, boiled milk and the various proprietary foods, and his experiments in detail are worth reading. One fact he emphasizes is that cow's milk is a solid and not a liquid food; that raw milk forms such large curds in the stomach that in infants, especially, some of these curds will pass through the intestinal tract and appear in the stools as tough, hard, bean-like curds. Whereas, with boiled milk, the curd is more flocculent, such as when breast milk is used, and the digestion is so nearly complete that the stool is a smooth, soft, homogeneous mass, lacking any curds of protein.

Furthermore, the same author gives experiments in vitro to show that there was a cohesion of the curds, when raw milk was used, forming large masses which require hard work on the part of the digestive apparatus to render them small enough to pass through the pylorus. Sometimes these curds are spit up or vomited, and you have noted how leathery and tough they are. On the other hand, the spitting up of boiled milk shows more the characteristics of mother's milk which has been acted upon by the gastric juices, namely, a soft, flocculent curd easily broken up. Comparing the nutritive value of boiled and raw milk, we know that cooking for a definite period kills certain enzymes which are essential to the individual to prevent scurvy and rickets. This latter may be overcome



by the administration of orange juice or other fresh fruit or beef blood juices. The work on the digestive tract is less, the child is able to take stronger proportions of milk which is boiled than raw. There is less colic because there is more complete digestion and an absence of undigested material in the bowel to undergo putrefaction. Boiled milk may be kept a longer period of time, if properly protected, even where there is a lack of icing. The stools of raw milk contain more or less tough, lima-bean-like curds, due to undigested protein, and many large soap curds from undigested fat. The boiled milk stool is smooth, homogeneous, has no lumps and such fat as has been undigested is represented by small soap curds, or in oily appearance. The stool is about the consistency of butter at room temperature, and usually a little lighter in shade than the breast milk stool, and if there has been a malt sugar used there may be a brownish shade.

**Complemental Feedings:** Now, supposing that the mother has a limited supply of breast milk, we can help the child to gain and still not take it off the breast by a little judicious complemental feeding. Don't tell a mother at the end of a week or two after birth that her milk does not agree with the child, or that it is too weak, or any other excuse for her to wean her child onto a bottle. The aforementioned contraindications to breast feeding are the only real serious indications for not nursing the child. Many mothers after they get up and around, especially after the first child, worry more or less about the baby, whether they are going to be able to nurse it; worry about their household duties; are on their feet too much, and soon notice their milk is getting scanty. Then they worry more, the baby has colic, there is loss of night's sleep, and the vicious circle is started. Now comes the kindly neighbor who advises condensed milk, or some other food, or the busy doctor who

has no idea how to advise feeding for a human being at a most critical period of life. How many surgeons are operating cases today which are the result of faulty or vicious feeding at the beginning of life of the patient? How many take a history of the feeding of early life in the cases of gastrointestinal troubles? How many obstetricians attend mothers with deformed pelvises from rachitis in early life due to faulty feeding? How many cases of appendicitis had their incipency in the intestinal inflammation due to faulty infant feeding, resulting in colic, especially the so-called "three months' colic"? The resulting mild peritoneal adhesions, the pulling into malpositions of the tender, thin appendix, later resulting in more or less obstruction to the normal circulation and to the proper outflow of the appendiceal contents.

Instead of weaning the baby, weigh it before and after each feeding, and estimate at the end of 24 hours how many ounces the child is gaining. Then if there is not sufficient milk and the child is hungry, make a simple milk modification, and after 10 or 15 minutes at the breast, complement with the bottle. Often this will be necessary for only a short period of time, and then the mother gets her rest, the baby sleeps, gets stronger, nurses more vigorously, and there is no further need for the bottle.

**Supplemental Feedings:** Some cases need one or more bottles daily, the supplemental feeding. Where the mother has to be away from the babe over one or more feeding periods, it is a simple matter to modify a small amount of milk. The child being mostly on the breast, often almost any rational arrangement of the milk and water will work nicely with no disturbance. The objection to this is the liability to a lessened milk supply.

**Simple Formula for Average Age** as to the arrangement of milk and water. What we are teaching to our graduate.

and interns seems to be readily comprehended, and seems rational, for we get the results.

Certain principles to be borne in mind:

1st. The age of the infant.

2nd. The weight.

3rd. The amount at a feeding.

4th. The number of feedings in 24 hours.

5th. To ascertain the amount of milk needed for the 24-hour mixture and the amount of sugar. Always remember that a child who has been exclusively upon the breast milk, cannot take the full strength formula at the start. So start a little low and work up to the amount needed.

A rough method for determining the amount at a feeding is to take  $1\frac{1}{2}$  to 2 ounces more than a child is months old up to 8 months, **not over** 8 ounces at a feeding. If the child is under two months of age at the start I usually give them one part of milk and two parts of water and work up to the requisite formula for the age as rapidly as possible, trying to have this formula by the time it has been under my care one week or ten days at the latest. For the child of six months of age, at the start I usually give half and half, increasing as before. Under 10 pounds, 1 ounce of sugar, and over ten pounds,  $1\frac{1}{2}$  ounces per day. Of the milk,  $1\frac{1}{2}$  ounces per pound of body weight. This gives us the milk and sugar. Then to obtain the amount of diluent merely subtract the amount of milk from the total number of ounces for the 24 hours (obtained by the number of feedings times number of ounces at a feeding). This may be checked by calories to see that the infant is getting the requisite number of heat units. The calories per weight and age are:

1st 3 months.....	50—45 calories
2nd 3 months.....	45—40 calories
3rd 3 months.....	40—35 calories
4th 3 months.....	32—35 calories

**Technique Boiling Milk:** We boil the

milk, especially when we do not know the child's digestive ability and when it has never had raw cow's milk, and our technique is about as follows: Boil the water, add the milk, stirring constantly to prevent the formation of scum which is casein, and when the milk comes to a boil, boil three minutes by the clock. Or put the milk and water in a double boiler and cold water in the bottom part. When this latter has come to a boil, allow to cook 10 minutes, stirring occasionally to prevent scum formation. At the end of that period remove from the fire, and stir up the sugar in 3 or 4 ounces of water to make up for what has been lost in evaporation and add to the mixture. We divide into the requisite number of bottles, cork, and set in a pan of cool water for 10 minutes, then on ice until ready to use. This technique may seem superfluous, but it is necessary to carry it out to the letter to get the best results. If this is not done the milk will have a scum form which will be difficult to pass through the hole in the nipple and besides the child loses some of the essential protein. For sugar we prefer Dextri-Maltose. If the bowels are constipated, we use some one of the higher concentrations of malt sugar, such as malt soup extract, following (3) Southworth's technique, namely, one tablespoonful of malt, one tablespoonful of flour to each 10 ounces of the milk mixture. It is possible to use milk sugar where a mere laxative action is required.

Starting with a lower formula than the age calls for, the infant gets accustomed to the food, and as its digestive apparatus cares for this, we increase the milk an ounce at a time, decreasing the water proportionately until we get up to our full strength formula. This can be done in shorter time than when raw milk is used. By the time the child is six months of age it is advisable to give it cereal, cooked at least two hours, starting with a tea-



spoonful, with sufficient raw cow's milk to make a thin gruel. This allows the child to get accustomed to carbohydrates.

**Feeding After Sixth Month:** At 7 months, with a strong robust child, we start giving vegetable soup, technique of which is as follows: Take the soup stock, cook the vegetables in this until they are tender, pour off the liquid and strain the vegetables through a fine sieve, then put back into the liquid and use a part of this and cow's milk at the noonday feeding, at first only once a week, later increasing up to two or three times a week. By the time the child is 9 months old it should be on raw cow's milk, taking 8 ounces at a feeding and not over one quart of milk in the 24 hours. The balance of the heat units being supplied by cereal, gruel, vegetable soup, toast and Zwieback.

From 12 to 24 months we give an average of 4 meals and one of fruit juices. These are divided as follows: Up to 18 months the child has a bottle at 6 o'clock and cereal with milk or toast with milk at 10 o'clock, then the nap. About 2 p.m. the main meal of the day, at 4 to 4:30 p.m. fruit juice and at 6 to 7 p.m., eight ounces of milk. After the 18th month the morning bottle is usually abandoned in favor of a heartier breakfast, usually about 8 to 8:30 and the schedule for the other meals the same as just given. We do not believe in giving large amounts of milk to the exclusion of other foods, and think a child does better to have some solid foods to chew. After the 15th month the child should have a little meat of some sort every other day until it is 20 to 22 months old, then every day, not large quantities, but sufficient to supply the necessary nitrogen for body growth. Eggs should not be given before the 12th month and then not oftener than every other day except in unusual circumstances. Meat and eggs should not be given the same day,

especially in the early months when starting out on protein diet. Otherwise we get more or less indicanuria.

**Constipation and Diarrhœa in Bottle Babies:** A mistake that is often made is to give the child too large a bottle of whole milk in which there is high fat content. This is productive of many forms of eczema, urticaria, gastric and intestinal disturbances. Many times in these bottle babies constipation will be present. This is true particularly in cases where top milk mixtures have been used or where cream has been added with the intention of overcoming constipation. These cases will be improved by reducing the butter fat and increasing the malt sugar. This may be done by merely substituting one or more level tablespoons of malted milk for one or more of Dextri-Maltose or use a like amount of milk sugar in place of the malt sugar. If the child is over four months of age oatmeal as a diluent is frequently used to overcome constipation. Over six months, oatmeal gruel and vegetable soups are valuable. It is wise to be sure that the constipation is not due to under-feeding, as often is the case, particularly where children have been cared for entirely by parents or nurses without proper instruction. This is readily determined by estimating the number of ounces of milk the child is getting according to body weight. On the other hand, where we have diarrhœa so many factors enter into the causation of this that we shall merely mention that much diarrhœa may be prevented by the use of properly boiled milk, proper sugar, and properly spaced intervals of feeding, providing the milk has been kept on ice. However, if diarrhœa does occur, stop the milk for 24 hours, give one, and only one, dose of castor oil, then weak tea sweetened with saccharin, at the regular feeding intervals for 24 hours. Then start in with a weaker formula than the child has been having. In Southern California this

is usually sufficient to care for the ordinary diarrhœa, providing it has not been going on long and the child is not moribund when seen. The principal thing in these cases is to get water into the individual and if it cannot be retained by mouth give it subcutaneously or intraperitoneally. We have used albumen milk in many of these cases when starting to feed after the preliminary starvation period, but outside of hospitals it is impracticable because of the difficulty in the technique of manufacture. We have had to improvise the following: Boiled, skimmed milk diluted with two-thirds or one-half of water as the case might be, with a 3 to 5 per cent Dextrin-Maltose. While this doesn't have exactly the same composition that albumen milk has, still we have a high protein, low fat and sugar content. We have used this with very satisfactory results. Of course, we don't continue this indefinitely, any more than we do albumen milk, but until the stools are dry, yellowish brown and we are rid of the diarrhœa and the child begins to retain its food.

**Conclusion:** Nothing new is offered, but our intention has been to bring to the attention of the practical men of Southern California some simple method of feeding infants, to get them away from condensed milk, malted milk and the various proprietaries which are used so extensively and to bring out the fact that infant feeding is not complicated, but simple, and to try to make better babies and citizens.

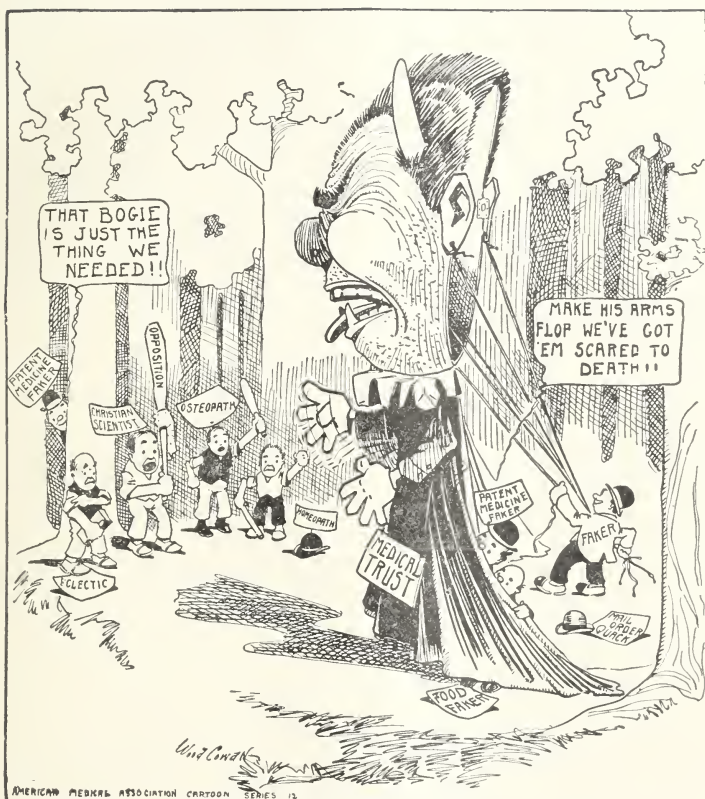
#### BIBLIOGRAPHY

- (1) Brennermann, Jos., J.A.M.A. Feb. 22, 1913.
  - (2) Brennermann, Jos., Arch. Ped. Feb., 1917.
  - (3) Southworth, N. Y., State Journal of Medicine, Sept. 15th—No. 9.
- 1501 So. Figueroa St.

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Dr. S. J. Brimhall, a graduate of the University of Minnesota, has located in Perris, Riverside County.

Nathan Smith Davis of Chicago, son of the illustrious founder of the American Medical Association, died in Pasadena, December 21, after a long illness from lymphosarcoma, aged 62. Dr. Davis was graduated from the Chicago Medical College in 1883, and early began a teaching career as associate professor of pathology in his alma mater, holding this position from 1884 to 1886. He later became professor of the principles and practice of medicine and clinical medicine in the Northwestern University Medical School which succeeded the old Chicago Medical College. For some years he served also as dean. In association with his teaching position he was attending physician to Mercy, Wesley and St. Luke's hospitals. Dr. Davis showed great interest in the improving of the pharmacopeia, acting as vice-president of the U. S. Pharmacopeial Convention, 1910-1920, and contributing many articles to medical literature on this subject. He served the American Medical Association in several capacities, acting as secretary of the Section on Practice of Medicine in 1887, as chairman of the Section on Pharmacology and Therapeutics in 1900, and as a member of the House of Delegates in 1902 and 1903. His interests were broad, including membership in the Ninth International Medical Congress and Pan-American Congress, several offices in the Illinois State Medical Society, chairmanship of the board of scientific governors of the Chicago Academy of Sciences, and membership in the Chicago Neurological Society, the Chicago Pathological Society and the Institute of Medicine of Chicago. Several years ago, failing health compelled his retirement from practice and ultimately necessitated removal of his residence from Chicago to Pasadena. However, even during his declining years he kept up an active interest in medical progress.



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This journal endeavors to mirror the progress of the profession of California  
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DR. GEORGE E. MALSARY, Editor and Publisher.

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Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton,  
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## EDITORIAL

### PROMISE YOURSELF

During 1921

- To be so strong that nothing can disturb your peace of mind.
- To talk health, happiness and prosperity to every person you meet.
- To make all your friends feel that there is something in them.
- To look at the sunny side of everything and make your optimism come true.
- To think only of the best, to work only for the best and to expect only the best.
- To be just as enthusiastic about the success of others as you are about your own.
- To forget the mistakes of the past and press on to the greater achievements of the future.
- To wear a cheerful countenance at all times and give every living creature you meet a smile.
- To give so much time to the improvement of yourself that you have no time to criticise others.
- To be too large for worry, too noble for anger, too strong for fear, and too happy to permit the presence of trouble.—*Selected.*

**DR. FERBERT AS DIRECTOR**

Whereas, at 3:30 p.m., Friday, December third, death took from us our dear friend and colleague, Dr. John C. Ferbert and

Whereas, Dr. Ferbert had for many years been a faithful, wise and efficient member of the Board of Directors of the California Hospital, and

Whereas, Dr. Ferbert was not only an able, conscientious and generous surgeon, but he was also a brave and patriotic citizen, having left his practice and enlisted early in the war, without asking for place or profit and his service during the war was unsurpassed in devotion, courage and ability.

Therefore, we, the Board of Directors of the California Hospital, hereby adopt the following:

Resolved that we hereby express our

deep grief at the loss of one for whom we had sincere affection and great esteem and we hereby extend to his brothers, sisters and other relatives, this testament of our profound sympathy with them in their hour of affliction and sorrow.

(Signed)

W. W. HITCHCOCK, President

GEO. L. COLE, Vice-President

H. BERT ELLIS, Treasurer

WALTER LINDLEY, Secretary

CARL KURTZ

W. T. McARTHUR

E. J. COOK

M. L. MOORE

REA SMITH

W. W. BECKETT

Directors

Los Angeles, California,  
December eighth, 1920.

**EDITORIAL NOTES**

Dr. L. C. Boyd of San Diego died on Dec. 22d from injuries received when he was struck by an automobile.

Dr. Nevin D. Pontius, diseases of the eye, formerly of Portland, Oregon, has taken offices in the Merritt Building.

Dr. Albert Soiland was recently elected president of the Radio Logical Society at its annual meeting in Chicago.

Dr. Nelson W. Janney of Santa Barbara will have offices in the State Building, 6th and Olive Streets, Los Angeles, beginning January 1st, 1921.

Dr. S. J. Mattison is now president of the Pasadena Medical Society, while Dr. R. I. Smith is vice-president and Dr. Caroline McQueston-Leete, secretary-treasurer.

Dr. Chas. A. Bell of Santa Barbara has been commissioned captain in the Army. He is to report for duty at Marsh Field, the Army Aviation Camp near Riverside.

Dr. C. C. Browning has been elected to the chair of diseases of the chest on the medical staff of the Santa Rita Clinic, conducted by the Bureau of Catholic Charities.

There is a vacancy in the position of Coroner in Los Angeles county and it is proposed to have a competitive examination for the same. The position pays about \$300 per month.

It is a delight to the profession of Los Angeles to see Dr. Norman Bridge again in our midst. He carries himself like a man of sixty, although he is somewhat older than that. May his days in our midst be many.

During the last week in November there were 17 new cases of smallpox in Richmond (near San Francisco), 37 cases in San Francisco, 22 cases in Lompoc, 11 cases in San Diego County and 4 cases in Los Angeles County.

Dr. F. W. Burns of Pomona was recently elected president of the Pomona Valley Medical Association.



Dr. W. H. Eaton was re-elected secretary-treasurer.

Dr. C. T. Lyster of 1920 Orange street, Los Angeles, has left for Mexico City to take charge of an extensive campaign for the eradication of yellow fever. He will have behind him the resources of the Rockefeller Foundation.

The Los Angeles Harbor Commission are putting forth efforts to have the U. S. Public Health Service assign a surgeon to Los Angeles Harbor. San Diego has three full-time Federal surgeons to handle the quarantine inspection at that place.

Surgeon Locates Here.—Dr. H. H. Bellwood, for many years surgeon of the Burlington Railroad at Alliance, Nebraska, has located in Long Beach to make his home and will engage in the practice of medicine and surgery here.

Dr. Chas. I. Bennett of Covina has been elected president of the Southern California Medical Society. Other officers elected were Dr. Edgerton Crispin of Los Angeles, first vice-president, and Dr. William Duffield of Los Angeles, re-elected secretary.

District Attorney Thomas Woolwine has written a very strong letter requesting the co-operation of the medical profession in a campaign against Christian Scientists and others who allow their sick children to languish and die without medical attendance.

Dr. A. H. Rowan, aged 97, a pioneer physician of Santa Ana, died Nov. 3d at San Diego at the home of his son. Dr. Rowan was born in Ohio in 1822. He came to California in 1850 and practiced medicine in a number of places in the state before settling in Santa Ana.

Marquis Mederic de Gerin, doctor, surgeon, philosopher and scientist, possessor of twenty decorations, including

that of the Legion of Honor, and one of the most renowned medical men produced by France during the world war, arrived in Los Angeles recently, where he proposes to locate.

Dr. J. Frank Lydston of Chicago has been adding to the social life of the medical profession of Southern California during a few weeks' visit to Los Angeles. As usual Dr. Lydston is in a very militant mood and never hesitates to express himself in strong Anglo-Saxon language.

Dr. Verdo B. Gregory, surgeon in charge and one of the owners of the Hill Crest Hospital at Hemet, had his left ankle and foot accidentally shattered when his gun went off while out hunting on November 24. Every effort is being made to save the foot, but it is still deemed problematical.

Major Alva D. S. McCoy, former police surgeon of Pasadena, recently spent a few days visiting with old friends. Dr. McCoy is now stationed at the Letterman Hospital in San Francisco. He left Pasadena more than three years ago and at the close of the war entered the regular service.

Dr. Sarah Hall Sawyer, graduate physician and wife of Dr. E. C. Hall, died Nov. 10th at her home in Hollywood. Death was due to Bright's disease, which had kept her an invalid for five years. She was 69 years old.

Mrs. Sawyer came to Los Angeles with her husband twenty-eight years ago. She graduated from Starling Medical College, Columbus, Ohio, in 1880, and practiced medicine in San Diego and Los Angeles. She leaves a son, E. O. Sawyer, Jr., of New York, and two sisters residing in Salem.

Mr. and Mrs. William Richard Rowland recently announced the marriage of their daughter, Nina Vivian to Dr. Clarence Gaines Toland on Wednesday, December 1st, 1920. The congratula-



tions and best wishes of the medical profession of Los Angeles are heartily extended to this talented couple.

Dr. Anna G. MacBean, age 37, died in Los Angeles November 12, after a lingering illness. She was a graduate of the University of California, from which she received the degrees of B.A. and M.D., and was a member of the Alpha Epsilon Iota sorority and of the Los Angeles County Medical Association.

Dr. John M. Radebaugh, the first physician to practice medicine in Pasadena, died on December 16th as a result of injuries received in an auto accident a week before. Dr. Radebaugh came to Pasadena 39 years ago. He was born 69 years ago in Gettysburgh, Pa., and was a graduate of the University of Pennsylvania.

The following officers were elected at the annual meeting of the Los Angeles County Medical Society, held Dec. 16th: Dr. Walter V. Brem, president; Dr. Hill Hastings, vice-president; Dr. Harlan Shoemaker, secretary-treasurer; councilors, Dr. Donald Frick, Dr. W. H. Kiger, Dr. J. Mark Lacey and Dr. Rea Smith, the retiring president.

In his address Dr. Brem brought out that the society should definitely decide to build a clubhouse this year.

Mrs. Effie Dohrman of Santa Barbara brought suit for \$55,000 damages, for alleged mal-practice, against Dr. Horace F. Pierce of the same city; her charges being that the doctor had not properly treated a fractured thigh bone. After two hours' deliberation the jury brought in a verdict of not guilty and the doctor was entirely vindicated.

Dr. E. Scott Blair, his wife and his only child, Edwin, aged 14 years, were instantly killed Dec. 4th when the second section of the Los Angeles Limited on the Salt Lake Railroad, crashed into their auto at Hesperia, San Bernardino County. He had been practicing in San

Bernardino since 1912 and was formerly superintendent of the So. Calif. State Hospital at Patton.

Dr. Lulu Peters of Los Angeles has returned from Albania and Serbia, where during the last two years she has been engaged in medical and surgical relief work for the Red Cross. She devoted most of her time to conducting health clinics for the mothers and starving, sickly children. She believes that the Herbert Hoover drive will save the lives of millions of babies.

At the recent meeting of the Western Surgical Association held in Los Angeles and Pasadena, Dr. Chas. D. Lockwood of Pasadena was elected president. Other officers named were: Dr. Harry T. Richey, St. Paul, vice-president, and Dr. W. S. Dennis, St. Paul, secretary. Dr. James Hill, St. Louis; Dr. A. F. Jona, Omaha; Dr. W. T. Coughlin, St. Louis, and Dr. Mann, make up the new executive committee.

St. Louis was chosen as the next place of meeting.

Dr. Chas. E. Holgate, age 41, of 1062 Laguna street, Los Angeles, was found unconscious in his office on the morning of December 14th and died at the Receiving Hospital about three hours later. The cause of death is thought to have been due to his slipping and falling on the floor and striking his head on the corner of a desk. He was a well-known practitioner in Los Angeles. He was a graduate of the Medical Department of the U. S. C., a Knight Templar and a member of the American Legion.

The Los Angeles Examiner says: "To celebrate the fiftieth anniversary of its founding, the Los Angeles County Medical Association will hold a banquet on the evening of January 31, according to announcement made yesterday. Three of the founders of the organization will be the honor guests. They are Dr. Walter Lindley, Dr. Joseph Kurtz and

Dr. J. P. Widney. The place for the banquet has not yet been selected."

During the late summer and fall more than 200 cases of poliomyelitis occurred in Boston and during the same period a total of 500 cases were reported in Massachusetts. The outbreak was received calmly and little was seen in the public press concerning it. Most of the cases in Boston occurred in the better residential districts. About 25 per cent of the cases proved fatal, about the same rate as prevailed during the outbreak of 1916. Nearly all individuals attacked were of pre-school age. The few cases that occurred in adults were unusually severe. The methods of control consisted chiefly of quarantine and isolation.

In announcing the opening of the Olive View Sanatorium for the tuberculous, it is stated that only those will be admitted who offer hope of being curable, who are citizens of the United States and who have lived in Los Angeles county for one year immediately preceding date of application. It is requested that every prospective patient for Olive View Sanatorium be given a letter addressed to the superintendent of Los Angeles County Hospital giving a concise account of the case to be presented in person at the examining room of the hospital at 1100 Mission Road, at 9 a.m., on Mondays or Thursdays. At that time the necessary preliminary medical and social investigation will be started, and when completed arrangements will be made for admission to Olive View if the applicant is found eligible therefor. By way of information it may be noted that the sanatorium is located four miles north of San Fernando among the foothills north of Sylmar at an altitude of 1500 feet.

Dr. Walter M. Dickie, secretary of the State Board of Health says: "Following the death from rabies of three children during the month of November

in San Joaquin County, the officials of that county and of the incorporated cities within the county immediately began an active campaign in the control of the disease. The Board of Supervisors now employs six men, each of whom is provided with automobile transportation, who are engaged in the enforcement of the county muzzling ordinance against dogs. The cities of Stockton, Lodi, Tracy and Manteca passed stringent muzzling ordinances which are being rigidly enforced by the health officers, marshals and poundmen in their respective communities. In addition all of the constables throughout the county are active in the enforcement of the muzzling provisions of the ordinance and stray dogs are being killed wherever they are encountered. Owners of animals are given full opportunity to provide muzzles and if they fail to comply with the requirements their dogs are destroyed. With such thorough co-operation on the part of the people and the officials of San Joaquin County, it is believed that rabies will soon be brought under control in that district."

#### **JAPANESE CAMPHOR ALLOTMENT FOR THE FOURTH QUARTER OF 1920**

Consul Dooman has cabled from Taihoku, Taiwan, that the allotments of camphor by the Japanese Camphor Monopoly Office for the present quarter (October, November and December, 1920) are as follows: To the United States, 2,335 piculs; to Great Britain, 900 piculs; and to France, 350 piculs. (Picul=133 $\frac{1}{3}$  pounds.) The share of the United States in this allotment is the same as that of the last quarter, referred to in Commerce Reports of July 14, 1920. The cablegram further states that prices for the fourth quarter are to remain the same as for the previous quarter, or 255 yen per 112 pounds, which is approximately \$1.13 per pound at normal exchange.

# SOUTHERN CALIFORNIA PRACTITIONER

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No. 2

Editor,  
DR. GEO. E. MALSARY

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Dr. Walter Lindley, Dr. W. W. Watkins, Dr. Ross Moore, Dr. George L. Cole,  
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Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. C. G. Stivers,  
Dr. Olga McNeile, Dr. W. H. Dudley, Dr. J. M. Mathews.

## \*DEDICATION CALIFORNIA LUTHERAN HOSPITAL

By REV. JULIUS LINCOLN, D.D.

We are assembled to dedicate the first Lutheran institution of mercy in the State of California and we praise God for the privilege. We do not ask to be considered great, the rather do we pray to be forgiven for having neglected golden opportunities, and humbly beseech the Divine Bishop for guidance and blessing. We do not crave a place in the sun of popularity and acclaim, but for grace and strength to fulfill our destiny under the cross of Jesus Christ in the great city where we live. We reckon it an honor to minister to Him of the pierced hands, through those for whom he has died, even "the little ones," the poor, the outcast, the sin-spotted, and, in so doing restore the image of God to its pedestal in the wrecked body, from which it has been hurled.

We also pray that this enterprise shall be instrumental in uniting our scattered forces and, that in the performance of deeds of mercy, we may take our place in the ranks among the other agencies, which are in operation to relieve suffering and distress. Hos-

pital business is not new to us. Elsewhere it has always been a part of our work, and there are men in our association, to whom the present undertaking is an old experience. The president, Mr. A. Larson, was one of the originators of the Norwegian Lutheran Deaconess Hospital, a notable institution in Chicago. The constitution of the Lutheran Society declares that in the conduct of the hospital the Spirit of the Good Shepherd shall everywhere prevail, that alongside of the most skillful, professional treatment, there shall also be loving service and tender solicitude for bodily comfort, for mental and spiritual rest. Dr. Dysinger, a pastor of experience, of tactful manner and big heart, will visit the sick and, if they so desire, just sit down and talk with them, as did the great Healer at the Pool of Bethesda. He will not force his pastoral attentions upon anyone, but the agonized features, the lonely heart and the depressed spirit will be his invitation to proffer ministrations. He will interpret the words, "Christian, character and sacrifice," in the training school

\*From address delivered Feb. 6, 1921, by which the California became the California Lutheran Hospital.

and ever hold before the eyes of the nurses and pupil nurses, the ideal of service, given by Him, who went down to the death for us.

It is fitting that a word be spoken about the men, who have built up the California Hospital and are now to retire. They have given the best years of their lives to the realization of plans to found, enlarge and maintain a hospital. That their efforts have been successful is evident by the magnificent plant, but still more by the return to health of thousands of patients and, perhaps, in a yet higher degree by having trained hundreds of splendid young women who, today, in different parts of the world, are engaged in lifting the cup of cold water to parched lips. These men have concluded to transfer the continuance of the hospital into other hands. As we of a younger generation take this institution over, we congratulate you men upon a life work so well done and bespeak for ourselves that same satisfaction in some future day, which you now feel, when we in turn look back upon a quarter of a century of service. The Lutheran Hospital Society also wishes to pay a tribute to your courtesy, your gentlemanliness and your honorable dealing with us, who have purchased your property. No transaction can have been cleaner, or more pleasant. It has been entirely free of haggling. From beginning to end every move has been in the open and we have been made to feel more like men for having been in contact with real men. To Dr. Walter Lindley, who has been the spokesman for his colleagues, we give our particular respects. We, who have executed the will of the Lutheran Hospital Society, are fully agreed that never in our experience have we been treated more fairly than by him. We are also deeply indebted to Dr. Lindley for his promise to remain with us, until we have become familiarized with our new surroundings, and thus be benefited by

his counsel. Doctor, may your years be many to enjoy the fruits of your labors and the friendships you have made and may the end of life be as golden and bright as the incomparable sunset on the Pacific.

We trust that we may keep the goodwill and co-operation of the physicians and surgeons, who have contributed to the high standing of the California Hospital. You will find us to be plain, ordinary men, who now have a new goal in life, which can be reached only by your aid.

It shall be our aim to merit the confidence of the alumnae association of the California Hospital Training School for Nurses, and to continue in the capacity of guiding your alma mater. Will you always remember to consider the California Lutheran Hospital as your very own, even as you did the California Hospital?\*

This noble institution fronts on Hope Street, an appropriate location. To every patient who enters the portals of the California Lutheran Hospital, we shall whisper, "There is hope within and there is hope beyond." The new owners face the future with hearts filled with hope, for they rely upon the substantial support of a philanthropic people and the blessings of Almighty God. Neither failing us, our hopes of greater service shall be realized.

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\*Location, 1414 S. Hope St., Los Angeles.

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The Upland News of recent date says: Announcements are out to the effect that Dr. C. Sheppard and Dr. S. A. Craig are now associated in the practice of medicine and surgery, with offices at the corner of C street and Euclid, Ontario. Dr. S. A. Craig will be better remembered here among his friends as "Steve" Craig. We now have in our midst Dr. Wm. H. Craig, Dr. John Craig, Dr. Mary Craig Williamson, Dr. W. H. Craig, Dr. S. A. Craig, and Dr. Tom Craig.



## NITROUS OXIDE OXYGEN, ANALGESIA AND ANESTHESIA IN OBSTETRICS

By R. F. HASTREITER, M.D., LOS ANGELES

From the dawn of history, attempts have been made to mitigate the pains of labor.

Among women in our present civilization this necessity becomes an urgent one, for unless relieved the subsequent health of the mother may be disastrously affected.

In contradistinction to the muscular women in the savage state, who delivered themselves with ease, labor in the high strung, nervous women of today is frequently pathological.

Some seventy-two years ago, Sir James Y. Simpson introduced the use of chloroform in obstetrics, and with the approval of Queen Victoria some six years later, analgesia became the fashion of the hour.

Analgesia as applied in this connection may be defined as a condition in which the individual is insensible to pain, while sense of touch and consciousness remain practically normal. Anesthesia, on the other hand, signifies entire loss of consciousness, including perception and tactile sensibility. (Long.)

Nitrous oxide and oxygen were first used in 1880 by Klikowitsch, of Petrograd, to produce analgesia. In the proportion of 80% nitrous oxide, 20% oxygen, he administered it to twenty-five patients and his observations showed that painless uterine contractions, without loss of consciousness were produced by three or four inhalations, and that the gases often stimulated uterine contractions, and that in none of the cases was there any diminution in the frequency or power of the contractions.

In this country Dr. J. Clarence Webster was one of the first to use nitrous oxide and oxygen in perative obstetrics and in 1909, it was first made use of

by him for Caesarian section.

In 1911, Goedel advocated its use in the second stage of labor, but it was not until July, 1913, that a Mrs. Luther administered the gas for six hours to the daughter of A. C. Clark—manufacturer of the Clark nitrous oxide apparatus—when confined by Drs. Lynch and Hoag of Chicago.

Dr. Lynch immediately became enthusiastic and afterward published a paper on the advantages of nitrous oxide and oxygen in obstetrics, which gave the necessary impetus to the profession; since when its use has become general in hospitals and private practice in the United States and Canada.

The consensus of opinion among authorities today is, that nitrous oxide when diluted with oxygen is the safest of any narcotizing agent in obstetrics, approaching it in efficacy, irrespective of the method of administration.

It is eliminated by the lungs almost immediately after its withdrawal and in the absence of cyanosis in the mother, it is without secondary effects either upon her or the child.

Woodyatt (Transaction Society-Exper., Biol. and Med., 1914) in 1914 sensitized a number of dogs to toxins by removal of their glycogen. No animal thus treated survived chloroform anesthesia for ten minutes. There were found to be marked changes in the secretions of dogs narcotized with ether for the same period of time.

After more than two hours of nitrous oxide and oxygen anesthesia no demonstrable tissue changes were in evidence, and the alterations in the secretions were practically nil.

Among its advantages the following might be enumerated:

Because of its freedom from danger in skilled hands, analgesia can be

maintained indefinitely and this can be rapidly merged into general anesthesia, when occasion demands. There appears to be no interference with either the strength, duration or frequency of the pains, while the vitality of the patient is conserved; the second stage of labor shortened, as is convalescence because of decreased fatigue.

Dr. Carl Davis of Chicago observed in a series of 104 cases that in primipara under nitrous oxide and oxygen the duration of labor was four and a half hours shorter, although the average weight of their babes was five ounces more, and in multipara the labor was 2.7 hours shorter, the babes averaging ten ounces more than in those mothers receiving no gas during their parturition.

Those who took nitrous oxide were able to leave the hospital one and one-half days earlier. That there is no interference with production was evidenced by the fact that the babes of primipara given nitrous oxide lost four per cent less of body weight than those of the unaided group.

There being no injurious selective action on any organ of the mother's body or that of the child, it should therefore be the anesthetic of choice, not only in normal labors, but also in the toxemias of pregnancy, operative obstetrics and subsequent perineal repair.

A few words relative to the technique might be of advantage:

In each individual case the proper mixture must first be ascertained. At the beginning of uterine contractions two to four quick inhalations of the mixture are sufficient to relieve pain.

The patient's color is normal, consciousness is preserved; she can bear down when directed, and can readily follow every command of the attending obstetrician.

By opening the mouth and breathing through it, any tendency to anesthesia

can be averted, should this become imminent.

In case the birth is advancing too rapidly or where relaxation is required, as in the final stage of delivery, a small amount of ether will satisfactorily overcome this difficulty.

Best results will not be obtained unless the gas is administered by a physician familiar with its use. Its efficacy and safety depend wholly upon the skill of administration and a thorough knowledge of its physiological action.

The percentage of oxygen varies largely with the individual and with the conditions presenting themselves from time to time.

Because the margin of working analgesia and anesthesia is so narrow, it is not easy to keep the proportion of gases at the proper point; too much nitrous oxide leading to cyanosis, jactitation, etc., with coincident dangers to the child; too little, and the pain-relieving effect is entirely negated.

No other agent in anesthesia requires quite as much skill for both safety and efficacy as does nitrous oxide. Over an experience of five years, I have found nitrous oxide and oxygen analgesia and anesthesia the most ideal for both mother and child, applicable in the home, as well as the hospital; within the reach of even those of limited means and I commend it to you most heartily tonight for your mature judgment and consideration.

718 Brockman Building.

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One of the features of the January meeting of the Harbor Medical Society which was held in the Virginia Hotel was the installation of the new officers. Dr. H. H. Heylman was installed as president, Dr. F. W. Reynolds as vice-president, Dr. B. von Wedelstaedt as secretary and treasurer and Dr. Roderick H. Shippey as councillor.



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## EDITORIAL

### THE SOUTHERN CALIFORNIA MEDICAL SOCIETY

A record-breaking meeting will be held at Santa Ana, Friday and Saturday, April first and second, 1921. And there is just this about it: you will either come or miss something worth while.

### THE CALIFORNIA LUTHERAN HOSPITAL

On Sunday, February 6th, dedicatory exercises were held and the California Hospital was formally transferred to the Lutheran Hospital Society in the presence of a large audience. The Rev. W. S. Dysinger is the superintendent-pastor with the following:

#### Board of Trustees

President.....	A. Larson
Vice-President.....	Julius Lincoln
Secretary.....	A. E. Isham
Treasurer.....	Emil Engdahl
Dr. G. Biorkman	John Knudtson
K. B. Norswing	G. A. Grabe
Carl Moller	A. J. Spindt
M. L. Ullensvang	T. T. Tallaksen
Rev. R.W. Mottern	J. C. Younggreen
F. M. Runkle	W. S. Dysinger, D.D.

There were earnest addresses by Rev. Julius Lincoln, D.D., Rev. Hugh K. Walker, D.D., Rev. W. S. Dysinger, D.D. and Dr. Walter Lindley.

Dr. Lindley in the course of his address said:

In 1896 Los Angeles was distressingly in need of a modern hospital. The medical profession, despairing of any other method of securing the necessary facilities for doing their duty to their patients decided to build a hospital themselves. The preliminary meeting was held at the office of Drs. Bicknell and Moore, Bradbury Building, October 30, 1897.

The following Board of Directors and Officers were then chosen:

Dr. F. T. Bicknell, President.
Dr. E. R. Smith, Vice-President.
Dr. W. W. Hitchcock, Treasurer.
Dr. Walter Lindley, Secretary and Manager.
Drs. F. K. Ainsworth, John R. Haynes, and Geo. L. Cole.

The first building was completed and the California Hospital opened its doors for patients June 11, 1898. Since that

date this hospital has cared for more than sixty-three thousand (63,000) patients. The Training School for Nurses has been steadily the great educational feature of the institution, it having graduated over 400 nurses, some of whom are holding the highest official positions possible in the United States, and others are doing valuable work as missionaries in foreign lands.

The present officers and directors are:

Dr. W. W. Hitchcock, President.

Dr. Geo. L. Cole, Vice-President.

Dr. H. Bert Ellis, Treasurer.

Dr. Walter Lindley, Secretary and Manager.

Drs. Carl Kurtz, P. O. Sundin, M. L. Moore, Rea Smith, W. T. McArthur, W. W. Beckett, and E. J. Cook.

The management have for several years realized that the California Hospital should reach a far broader and higher field than was in their power to achieve and they welcome the advent of the Lutheran Church as the sponsors of this great work.

The possibilities are beyond words, and I sincerely believe the California Hospital of the Lutheran Church will reach a high standard of usefulness and prove a great blessing to Southern California.

#### LOS ANGELES COUNTY ANNI- VERSARY

The great dining room of the Ambassador was brilliant with happy faces and beautiful women adorned tastefully with all of the colors of the rainbow on Monday evening, January 31st, at the banquet given by the Los Angeles County Medical Association in celebration of its fiftieth anniversary.

Drs. Joseph P. Widney, Joseph Kurtz and Walter Lindley, the three living incorporators, were the guests of honor.

Drs. Harlan Shoemaker, Stanley Black and Geo. Piness were the wonderfully efficient committee of arrange-

ments. To the music of an excellent orchestra more than five hundred sat down to the following menu:

Canape of Fresh Caviar	
Celery	Ripe Olives
	Consomme Florida
	Filet of Sea Bass-Meuniere
	Potatoes-Persillade
Broiled Squab Chicken	
	Virginia Ham
	New String Beans Au Beurre
	Tomato Surprise
Biscuit Tartoni	Fancy Cakes
	Demitasse
Cigars	Cigarettes

After this material feast, the following mental pabulum was served:

President's Address

.....Dr. Walter V. Brem

#### TOASTS

Toastmaster.....Dr. W. T. McArthur  
Our Philanthropic Institutions

.....Rt. Rev. John J. Cantwell  
Early Days.....Dr. Joseph Kurtz  
Laying the Foundation

.....Mr. Celestine J. Sullivan  
Doctors and Bishops

.....Rt. Rev. W. Bertrand Stevens  
The Outlook....Dr. Harlan Shoemaker  
As Others See Us

.....Rabbi Edgar F. Magnin  
Our Fiftieth Anniversary

.....Dr. Walter Lindley  
Doctors and Drama

.....Mr. Frederick Warde

Every speech was a good one and the interludes of Toastmaster McArthur were replete with witty stories and beautiful and appropriate poetical quotations. It was 11 p.m. when Frederick Warde, the great tragedian and delightful raconteur, arose to respond to the toast: Doctors and the Drama. He was greeted with great and long continued applause. For thirty minutes this great actor held his audience in enthusiastic attention. What a joy that address was! It was a glorious climax to a delightful evening.

**TRAINED NURSES AND SCABS****Nursing Lack Kills Thousands**

NEW YORK, Jan. 27.—Seventy thousand babies and 10,000 mothers died from childbirth in the United States last year for want of nursing, Mrs. W. K. Vanderbilt, member of the advisory council of the national organization for public health nursing, declared in a statement tonight.—From the Los Angeles Times.

The above gives some idea of the nursing situation yet the tendency of nursing organizations and official nurses is to increase the requirements for entering nurses' training schools and, as they say, "raise the standard" of the curriculum. What is needed is to reduce the requirements and the burden of the pupil nurse and double the number in our training schools so that we may send out enough qualified nurses, with the missionary spirit, to save the 70,000 babies and 10,000 mothers annually.

As an example of the Trades Union methods of today, the following letter is an example. A young man, graduate nurse, was nursing a man of very moderate means who required comparatively little attention. To save unnecessary expense this nurse agreed to stay with him 24 hours. This was contrary to the rule of the nurses that no nurse shall be on duty more than 12 hours out of 24. The Los Angeles nurses got into a state of indignation and he received the following letter:

Los Angeles, Jan. 28, 1921.

Dear Scab:

On first hearing of your doing 24-hour duty, we were inclined to be angry; but on thinking it over and considering the source, we are inclined to think it a bit pathetic. It is just what could be expected of a weak-kneed, weak-chinned individual. Your actions have brought us to the realization that you don't belong to the ranks known as R. N. You belong to the class of lowbrows, known as scabs.

A scab is ignorant, contemptible, inefficient and lazy. That's why they are scabs. If they were intelligent, efficient workmen, they would not find it necessary to stoop to conditions below their standard. Of course we realize that a scab's only means of maintenance is knocking where his brother workman boosts, and boosting where his brother workman knocks. A scab is never successful because he does not believe in co-operation.

If you do not co-operate with your profession and associates and stand loyal to every cause for the betterment of the individual or profession, you are a slacker and a scab. And the members of your profession shall make it their duty to knock you and your kind.

**DR. WIDNEY AT EIGHTY**

It was a universal regret at the fiftieth anniversary that Dr. Joseph P. Widney was not present, but the following splendid letter to Secretary Shoemaker shows that intellectual and spiritual fire still courses through our nestor's veins:

Los Angeles, Cal., Jan. 29, 1921.

To Harlan Shoemaker, M.D.,

Secretary Los Angeles County  
Medical Association.

Dear Doctor:

Will you kindly express to the Association at the Anniversary Meeting my appreciation of the honor conferred upon me in making me a guest of honor at the banquet. As I am now in my eightieth year, and have still heavy work upon me, and planned for the future, I am learning to conserve health and strength by keeping early hours and avoiding night dinners—bed by 10—up by six. I shall not be able to be present, but wish you a pleasant meeting, and the Association many years of useful life. The Association is now the oldest in the state, the State Society having ceased to meet, and then having organized anew. This Association, how-

ever, has a continuous record. I issued the call for its first meeting, and was the first secretary. My old friend, Dr. J. S. Griffin, was the first president. I think I have among my papers still his certificate of membership, signed by myself as secretary. I hope you may all come to the eightieth year in as good a state of bodily vigor as myself—eyes, ears, teeth, hair, in perfect condition,

and hand as steady with revolver or scalpel as in the old army days of fifty-five years ago, when I was battling with Apaches. It comes from no liquor, no tobacco, hard work, and plain living. I plan for work years ahead, but keep the books posted up each night.

Very respectfully,  
(Signed) J. P. WIDNEY.

## EDITORIAL NOTES

Dr. C. L. Bennett has reopened offices in Los Angeles in the Consolidated Realty Building.

San Jacinto and Hemet can well be proud of the hospital on Bothine Heights conducted by Dr. Verdo B. Gregory, assisted by Dr. J. A. Ramsay.

Dr. W. A. Weldon, the pioneer surgeon of Los Angeles Harbor, has returned to San Pedro after an absence of two years and is associated with Drs. Robins and Goodrich.

Dr. P. J. Parker, one of the pioneer physicians of San Diego, has located in Elsinore. We believe Elsinore is superior to any other place in California for its equipment for scientific hydrotherapeutics.

Dr. W. T. Grenfall, noted English physician, who has devoted his life to a work of mercy among the people of far away Labrador and North Newfoundland, is soon to be a visitor in Southern California.

Dr. Clarence A. Jenks, who graduated from the University of Southern California in 1903, died at his residence in Los Angeles, January 9th. Death was caused by pyemia, due to infection from the throat.

Dr. Charles W. Anderson, the surgeon, formerly of Los Angeles, but more recently of Calexico is spending six months in post-graduate work in Johns Hopkins University. He expects to return to practice in Los Angeles.

News comes from England that Dr. Margaret Farwell Ramsden has recently received from the King of Roumania a medal for services rendered in typhus work. This is the second member of the Los Angeles County Medical Association to be granted the Order of Officer of the Crown of Roumania—Dr. Frank C. Wiser having been presented with one in 1919 in recognition of his work in charge of the Hoover Commission in that country.

Dr. Thomas L. Stedman, in speaking of the causes of death of the French monarchs says: Charlemagne seems to have died of pneumonia, while Louis VII and Philippe VI succumbed to the results of venereal abuses, and Francois I died of syphilis outright. Louis X is said plausibly to have died from the effects of a draught of ice water. But it is possible to throw doubt on such diagnoses because the symptoms were not recorded by men of professional training.

GRAND RAPIDS (Mich.) Jan. 27.—“Twenty-one members of the staff of Blodgett Hospital, suffering from an undetermined poison, were reported tonight to be responding to treatment. Further fatalities were not looked for. This report included J. P. Allen who, it was said early today, could not recover. An analysis of food served at the hospital last Saturday, some of which was believed to have caused three deaths, was nearing completion tonight.” It



was later decided that botulism, from eating canned spinach, was the cause.

Dr. J. S. Gordon, a graduate of Keokuk Medical College, who had practiced medicine 30 years in Ogden where he had been city physician, president of the Ogden General Hospital and Southern Pacific surgeon, died in Los Angeles, where he had resided three years on January 5th. Death was due to being run down by a motor truck. He was past eminent commander of El Monte Commandery of Ogden and was a Shriner. The Masons conducted the funeral, a Presbyterian clergyman officiating. The doctor was 66 years of age.

January 6th Dr. Frederick J. Thorpe Old, died at his home in Hollywood of uraemic poisoning. Dr. Old was born in Caledonia, Canada, 48 years ago. He was graduated in medicine from Toronto University and Victoria University, taking his post-graduate work at Johns Hopkins University, where his daughter Louise is now a student in the clinical laboratory. He came to Hollywood seven years ago. Dr. Old belonged to the American Medical Society, the California State Medical Society and Los Angeles County Medical Association.

Dr. Walter M. Dickie, secretary of the California State Board of Health, makes the following statement: During 1920 there occurred the following cases and deaths from human plague in the United States: Florida, 10 cases and 4 deaths; Louisiana, 7 cases and 3 deaths; Texas, 32 cases and 17 deaths. During the same period of time large numbers of infected rodents were discovered in these states. Fortunately, but one fatal case of plague in a human occurred in California during 1920, although infected rodents, mostly ground squirrels, were found in large numbers last year in eight counties of Central California.

The following officers have been elected for the recently incorporated St. Luke's Hospital, which is to be built in Santa Monica at a cost of \$200,000; Dr. E. C. Halliday, president; Dr. Robert O'Neal, first vice-president; Dr. C. W. Craik, second vice-president; A. L. Shipley, treasurer, and Wyllys Abbot, secretary. The directors are Mayor A. E. Coles of Venice; Dr. C. W. Craik, Robert O'Neal and I. L. Magee, of the same city; Dr. E. C. Halliday of the Venice Receiving Hospital; Phillip H. Koshler of Los Angeles and A. L. Shipley, president of the First National Bank of Venice.

The Santa Barbara County Medical Society recently elected the following officers for the ensuing year: Dr. H. C. Bagby, president; Dr. H. L. Schurmeier, secretary; Dr. W. J. Mellinger, first vice-president; Dr. O. C. Jones of Lompoc, first vice-president at large; and Dr. W. T. Lucas of Santa Maria, second vice-president at large. Dr. C. S. Stevens was appointed delegate to the state society and Drs. G. R. Luton and H. E. Henderson were appointed alternates. The official legislation committee which was appointed to review and consider different bills brought before the State Legislature is composed of Drs. A. C. Soper, R. W. Hartwell, J. C. Cummings of Carpinteria, O. C. Jones of Lompoc and W. T. Lucas of Santa Maria.

Dr. Geo. L. Hutchinson, age 62, died in Los Angeles January 7th. Dr. Hutchinson, who was born at Cedar Rapids, Iowa, May 8, 1859, came to Colton in 1889 as surgeon for the Southern Pacific at that point. In 1900 he came to Los Angeles on the surgical staff of the Southern Pacific and Pacific Electric. He was appointed chief surgeon for the Pacific Electric in July, 1913, and served in that capacity until compelled to ask for leave of absence several weeks ago on account of failing health. He leaves a widow, who has



been critically ill for several days, and two daughters, Ruth and Edith Hutchinson. He was a graduate of the Long Island College Hospital and was an honorable, dependable surgeon who always did his work modestly and well.

The Medical Record (N. Y.) says: **Alleged Deaths from Botulism.**—Tinned beef which has been in the galley of the Greek steamship *Iokasto* for four months has caused the death of its first officer and two cadets. Two other cadets were taken critically ill at the Staten Island Hospital. The *Iokasto* arrived at Quarantine on December 27. During the voyage the ship's food supply was exhausted and a new supply which was expected at Quarantine did not come, so the crew ransacked the galley and found the canned beef. All who partook of it became ill. Agents of the Department of Health have taken samples of all food aboard the vessel for analysis. The newspapers report these as deaths from botulism, a word which has taken the place, in popular parlance, of ptomaine poisoning.

Some months ago Dr. Henry R. Harrower offered several cash prizes to the medical profession amounting to \$500 for a series of articles on various phases of the subject which interests him so much and which is the chief work of the Harrower laboratory. Scores of physicians throughout the United States and several in Holland, France and England have contributed essays of varying degrees of merit and recently the prize money was divided. The first prize of \$250 goes to Dr. Leigh F. Watson of Chicago. The second prize of \$100 goes to Dr. G. L. Rohdenburg of New York City. The third prize of \$75 goes to Dr. F. J. Farrell of Providence, R. I. The fourth prize of \$50 goes to Dr. Hyman Goldstein of New York City and the fifth prize of \$25 to Dr. J. Marion Read of San Francisco. The judges in the contest were Dr. E. B. Teuter of Chicago, Dr. James

C. Wilson of Philadelphia, and Dr. H. R. Harrower of Glendale.

The Los Angeles County Medical Association, January 11, elected the following new members: Harry X. Cline, M.D., 715 Hollingsworth Bldg.; Edwin M. Clinton, M.D., 1109 Baker-Detwiler Bldg.; Ameen Fareed, M.D., 1102 Black Bldg.; Kendal P. Frost, M.D., 424 Cons. Realty Bldg.; J. Antonio Gaxiola, M.D., 143½ S. Broadway; Leon Deane Godshall, M.D., 927 Cit. Nat. Bk. Bldg.; Albert Harlan Currie, M.D., 307 Investment Bldg.; John Hunter, M.D., 609 Haas Bldg.; C. R. Laraway, M.D., 1020 Story Bldg.; William D. Napheys, M.D., 1767 Orchid Ave.; J. E. McKillop, M.D., 306 Mer. Nat. Bk. Bldg.; Arturo Pallais, M.D., 143½ S. Broadway; Homer Aldrich Rue, M.D., 319 Hollingsworth Bldg.; Seith Hubbard Savage, M.D., Lancaster, California; P. M. Williams, M.D., 607 Investment Bldg.

The Los Angeles Times says, on January 17 the Masons conducted the funeral services of Dr. Frederick Leix, prominent surgeon and X-ray specialist, who died at his home at 1515 West Forty-ninth street Friday from liver trouble. The services at the Bresee chapel will be in charge of Hollenbeck Lodge No. 319, of which Dr. Leix was Past Master. Cremation will be at Rosedale Cemetery. Dr. Leix died at the age of 56 years. Born at Wittenberg, Germany, he came to this country when he was 16 years of age and later was graduated from the California Medical College. After engaging in general medical work for a number of years he became specially interested in X-ray work in 1913 and later established a large X-ray laboratory at 611-635 Baker-Detwiler Building. He was a prominent member of the Los Angeles County Medical Association and had been a resident of this city for more than fifteen years. Dr. Leix leaves his widow, Dr. Frances G. Leix; a son,

Frederick Leix, Jr., and a sister, Mrs. Fred Leitz.

Another Anti-Japanese Argument.—Mr. George E. Vincent, president of the Rockefeller Foundation, authorizes the following: The discovery by Dr. Hideyo Noguchi, at the Rockefeller Institute for Medical Research, of a vaccine for yellow fever, introduces a new factor in yellow fever control through the possibility of making persons immune to yellow fever by vaccination. Heretofore, work in yellow fever control has been entirely that of prevention of infection by controlling breeding places of the mosquito which carried the yellow fever germ. The isolation of the yellow fever organism, however, has made it possible for Dr. Noguchi to develop a serum which it is believed will reduce the mortality from yellow fever and a vaccine which gives promise of protecting the non-immunes against contracting the disease. Already vaccination against yellow fever of people going to tropical countries is being made in New York. This work is being done at the Broad Street Hospital with vaccine furnished by the Rockefeller Institute.

Dr. Walter M. Dickie, secretary of the State Board of Health, in a recent letter says: Attention is called to the fact that 205 cases of smallpox were reported in California last week. If the disease continues to spread at its present rate the year 1921 will bring a record of many thousands of cases. During 1920 nearly 4500 cases were reported to the State Board of Health. The graph which accompanies this week's Public Health News shows the remarkable increase in the prevalence of smallpox during the past few years, with the curve for 1920 shooting far above the curves for all preceding years. Until vaccination is demanded by the general public, health officers must expect the disease to continue in this unfavorable status. What is your community doing to prevent the appear-

ance of this most easily preventable disease? Following are the number of cases of smallpox reported by years since 1913:

Year	Cases Reported	Year	Cases Reported	Year	Cases Reported
1913	803	1916	232	1919	2004
1914	677	1917	320	1920	4489
1915	336	1918	1091	....	....

The Los Angeles County Medical Association elected the following new members at their meeting held February 7, 1921: E. W. Ames, M.D., 1040 W. Edgeware Road; Charles F. Applegate, M.D., Norwalk State Hospital; C. A. Bachhuber, M.D., 502 Brockman Bldg.; P. B. Exelby, M.D. 412 W. Sixth St.; Lewis Gaulden, M.D., 1100 S. St. Andrews Place; Norman H. Goodnow, M. D., Sierra Madre; H. J. H. Hara, M.D., Moneta, Calif.; Greg Hoskins, M.D., 625 Markwell Bldg., Long Beach; Elmer H. Johnson, M.D., 1474 La Prada Park; J. Walter Kean, M.D., 1102 Black Bldg.; George M. Malkin, M.D., 503 Bradbury Bldg.; Clarence Mellman, M.D., 819 E. 29th St.; Frank Parizek, M.D., 621 Story Bldg.; Hyman Rapaport, M.D., 1048 W. Temple; John A. Sasso, M.D., 318 W. 55th St.; Homer C. Seaver, M.D., 2893 Sunset Pl.; W. Burr Smith, M.D., 2834 Stephenson Ave.; Paul F. Straub, M.D., 1900 N. Vermont Ave.; Irwin C. Sutton, M.D., 621 Baker-Detwiler Bldg.; O. I. Tower, M.D., 217 Brockman Bldg.; Edwin S. Bennett, M.D., 733 Chapman Bldg., transferred from New York; Frank C. Chamberlain, M.D., 214 Baker-Detwiler Bldg., transferred from Denver; Edgar E. Gelder, M.D., 154 Kingsley Drive, transferred from Peoria; James B. Dean, M.D., 1501 S. Figueroa St., transferred from St. Louis; Robert B. Grubbs, M.D., 201 Dudley Bldg., transferred from Texas; Clarence F. Ott, M.D., St. Johns Bldg., Whittier, transferred from Louisville, Ky.; David Newton Jones, M.D., 302 Euclid Ave., transferred from Minneapolis; Ralph J. Sewall, M.D., Cartago, Inyo Co., transferred from San Francisco.

## BOOK REVIEWS

**GENERAL PATHOLOGY.** By Dr. Ernst Ziegler, Professor of Pathological Anatomy and of General Pathology in the University of Freiburg in Breisgau. From the eleventh revised German edition (Gustav Fischer, Jena, 1906). Revised by Douglas Symmers, M.D., Director of Laboratories, Bellevue and Allied Hospitals, formerly Professor of Pathology in the University and Bellevue Hospital Medical College. With 604 Illustrations in black and in colors. New York, William Wood and Company. Price \$7.00.

This revision presents the subject of pathology from the standpoint primarily of the needs of the medical student, while preserving the usefulness of the book as a convenient reference for the practitioner. Many changes in the language of the translation have been made, that more simply and directly express the views of the author, and a considerable amount of new subject matter has been added, in addition to needed alterations in portions of the old, including the subjects of acromegaly, Addison's disease, status lymphaticus, eunuchoidism, autolytic, amyloid and Zenker's degenerations, ochronosis, haemochromatosis, and bronzed diabetes, carotinaemia, lipomatosis and the embryonal fat cells, ossifying myositis and multiple exostoses, the skin moles, malignant transformation of myomata, neuroblastoma, polycystic kidneys, lymphosarcoma, pseudoleukemia, Hodgkin's disease, the multiple myeloblastomata, Martland's tumor of the bone marrow and Barrie's haemorrhagic osteomyelitis, surgical tuberculosis of the intestine, Wilms' tumor, anthrax, ascariasis in the appendix, trichina embryos in the blood, juvenile gangrene, the effects of the so-called pandemic influenza, botulism, the reactions to arsphenamine, a somewhat drastic rearrangement of the chapter on thrombosis, etc. Some of these changes appear in small type while others have been interpolated in the original text. The general arrangement of the book has not been disturbed, although many of the old

illustrations have been eliminated. In general, these have been replaced by photographic reproductions from the wards and laboratories of Bellevue Hospital. In the same way, some of the older literature has been omitted and in its place, wherever possible, references to works in English have been substituted.

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**THE DIFFICULTIES AND EMERGENCIES OF OBSTETRIC PRACTICE.** By COMYNS BERKELEY, M.A., M.D., M.C., Cantab, F.R.C.P., Lond., M.R.C.S., Eng. Obstetric and Gynecological Surgeon to the Middlesex Hospital; Surgeon to in-patients, Chelsea Hospital for Women; Senior Obstetric Surgeon, City of London Lying-in Hospital; Gynecological Surgeon, Eltham and Mottingham Hospital; Lecturer on Obstetrics and Gynecology, Middlesex Hospital Medical School; Examiner in Obstetrics and Gynecology to the Universities of Oxford, Cambridge, London, Manchester and Sheffield; sometime Examiner in Obstetrics and Gynecology to the University of Leeds and the Conjoint Board of London, and VICTOR BONNEY, M.S., M.D., B.Sc., Lond., F.R.C.S., Eng., M.R.C.P., Lond. Assistant Obstetric and Gynecological Surgeon to the Middlesex Hospital; Lecturer on Practical Obstetrics, Middlesex Hospital Medical School; Surgeon to the Chelsea Hospital for Women; the Freemasons' Hospital; Gynecological Surgeon to the Miller Hospital, the Putney Hospital, and the Hospital for nervous disease, Maida Vale; Examiner in Obstetrics and Gynecology to the Conjoint Board of England; late Emden Scholar and Mercers Prizeman, Middlesex Hospital Cancer Research Laboratories, and Hunterian Professor, Royal College of Surgeons of England. Third Edition with 309 Illustrations, Philadelphia, P. Blakiston's Son & Co., 1012 Walnut Street. Price \$11.00 net.

This work affords guidance in plain terms to the practitioner when he is called upon to deal with the difficulties and emergencies that attend obstetric practice. The physiology and the management of normal pregnancy, labor and puerperium are omitted. Dr. Hubert Bond, one of His Majesty's Commissioners in Lunacy, is responsible for the article on Insanity in Connection with Childbearing, which is entirely by his pen. The book has been thoroughly revised and much new matter has been added. In particular we would draw the reader's attention to the chapter

on "The Feeding of Infants," which has been written by Dr. H. C. Cameron. Berkeley and Bonney is a valuable aid to the practitioner in the difficulties and emergencies of obstetric practice. However, we wonder if the authors really use and recommend the constrained position represented in figure two, which might be described as an improper Sims position, with the left side of the pelvis, the back of the chest and the right side of the head downward.

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**ANAESTHETICS, THEIR USES AND ADMINISTRATION.** By Dudley Wilmot Buxton, M.D., B.S., Member of the Royal College of Physicians; sometime President of the Society of Anaesthetists; Member of University College; Consulting Anaesthetist to University College Hospital and to the National Hospital for Paralysis and Epilepsy, Queen Square, and to the Royal Dental Hospital of London; late Anaesthetist to King George Hospital, and Administrator of Anaesthetics and Lecturer in University College Hospital. Sixth Edition, Philadelphia, P. Blakiston's Son & Co., 1012 Walnut Street, 1920. Price \$6.00.

The whole of the book has been revised and some sections have been rewritten. The chapter dealing with Complications and Dangers has been enlarged and its arrangement modified. It now includes Shock and the little understood subject of Angio-neurotic Oedema, and the treatment of hemorrhage before and under anaesthesia. A fuller account of Massage of Heart is now presented, since that plan of treatment has proved more successful than it was a few years ago. The Posture of the patient, important in all cases, whether they are normal or involve special dangers, has been fully discussed. There are many good methods: some are valuable in individual cases, dangerous in others. To obtain the best success the anaesthetist must be familiar with all, and be capable of fitting the appropriate anaesthetic and best method to the exigencies of any particular patient or operation. Otherwise failure or discredit of a method ensues.

**DISEASES OF THE SKIN.** By Jay Frank Schamberg, A.B., M.D., Professor of Dermatology and Syphilology; Graduate School of Medicine, University of Pennsylvania; Fellow of the College of Physicians of Philadelphia; President of the American Dermatological Association, etc., etc. Sixth Edition, Revised and Enlarged, with 119 Illustrations, Philadelphia, P. Blakiston's Son & Co., 1012 Walnut St. Price \$2.00 net.

This is a Blakiston Compend. The text has been thoroughly revised to bring the subject matter up to date. The treatment of syphilis has been rewritten. New chapters have been added on some of the rare diseases. The author has followed Dühring's classification in the presentation of the subject, although deviations in connection with one or two diseases occur.

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**A SYNOPSIS OF MEDICINE.** By Henry Letheby Tidy, M.A., M.D., B.Ch. (Oxon.), F.R.C.P. (Lond.) Assistant Physician to St. Thomas's Hospital; Physician to the Great Northern Hospital; formerly Assistant Clinical Pathologist and Medical Registrar to the London Hospital. New York, William Wood and Company. Price \$6.50.

This book provides a synopsis of such principles of medicine as are of importance at the present time. A wider scope has been adopted than merely the classification of the most prominent details of each disease. So far as possible the symptoms have been fully enumerated and briefly explained, and the pathology of the disease and reference to the most probable or best-known theories have also been included. By means of short summaries and special headings, those data which are of greatest importance have been clearly indicated. The sections on treatment have been planned to afford a ready reference to a reasonable procedure, and no attempt has been made to give numerous alternative methods or prescriptions. A full index has been provided. The book is of assistance to those who have to revise rapidly their knowledge of medicine in general or of some disease in particular: to the worried student whose final examinations are within sight and to the hurried practitioner from whose ken they have



long passed, possibly even to the teacher with a lecture to prepare and to the examiner who, for the purposes of a viva voce, desires to renew for a brief period his knowledge of any of the essential details of medicine. The "synopsis" cannot replace a text-book to the student, and any attempt to make it do so will inevitably lead to failure.

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**PRACTICAL PSYCHOLOGY AND PSYCHIATRY.** For use in training schools for attendants and nurses and in Medical classes, and as a ready reference for the Practitioner. By C. B. Burr, M.D., Medical Director of Oak Grove Hospital (Flint, Mich.) for Mental and Nervous Diseases; member of the American Medico-Psychological Association, of the American Medical Association, of the American Neurological Association; Fellow of the American College of Physicians; Foreign Associate Member of Societe Medico-Psychologique of Paris, etc. Fifth edition, revised and enlarged with illustrations. Philadelphia, F. A. Davis Company, publishers. Price, \$2.00.

In this revision important additions have been made to the Chapters on Psychology and Forms of Insanity. As to classification, the recommendations of the National Committee for Mental Hygiene have been largely adopted. A new chapter on the Prevention of Insanity has been incorporated. It is the most lucid manual on psychology and psychiatry.

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**HYGIENE.** Specially intended for those studying for a diploma in public health. By W. Wilson Jameson, M.A., M.D. (Aberd.), M.R.C.P. (Lond.), Medical Officer of Health and School Medical Officer for the Urban District of Finchley; Lecturer on Sanitary Science at the Hackney Institute; Examiner in Hygiene to the National Health Society; late Assistant and Lecturer in the Department of Hygiene, University College, London, and Assistant and Deputy M.O.H., Metropolitan Borough of Stoke Newington, and F. T. Marchant, M.R. San. I.; Assistant in the Department of Hygiene, University College, London, Lecturer on Elementary Science at the National Health Society, and Assistant Public Analyst. With 18 illustrations. Philadelphia, P. Blakiston's Son & Co., 1012 Walnut Street, 1921. Price \$4.00 net.

This little book epitomizes the views of accepted authorities in the most recent work on the huge subject of

Hygiene. It is a carefully edited collection of the notes used by the authors for teaching purposes at the University College. The sections dealing with purely practical subjects have been cut down to make room for more theoretical material, so that the manual will prove useful for rapid revision of D. P. H. examination work. A good many references to literature are in the text, and a list of standard books is inserted.

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**FRENCH-ENGLISH MEDICAL DICTIONARY.** By Alfred Gordon, A.M., M.D. (Paris), late Associate in Nervous and Mental Diseases, Jefferson Medical College; late Examiner of the Insane, Philadelphia General Hospital; Neurologist to Mount Sinai, to Northwestern General and to the Douglass Memorial Hospitals; Member of the American Neurological Association; Fellow of the American College of Physicians; Corresponding Member of the Societe Medico-Psychologique De Paris, France; Member of the American Institute of Criminal Law and Criminology, etc. Philadelphia, P. Blakiston's Son & Co., 1012 Walnut Street. Price \$3.50 net.

The wealth of scientific information which French medicine has to offer can properly be grasped by those who are able to be in constant touch with the literature in its original language. The monumental work of the individual investigators in each chosen specialty is overwhelming by its profound erudition. The accumulated data during the recent war prove amply that the power of observation in its accuracy and precision as revealed by French scientists deserves special attention. To those who follow closely the progress in French medicine in the original writings the present dictionary is of special value. Moreover, those who since the cessation of hostilities have decided to continue the study of the language will find in the Dictionary a means of learning its proper pronunciation. It is a help to the well educated physician.

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Subscribe for the Southern California Practitioner, \$1.00 per year, 1414 S. Hope St., Los Angeles, Cal.



## MISCELLANEOUS

### SAVE MONEY ON MEAT

Here are real thrift recipes for a tasty, nutritious dish prepared from less costly meat. These recipes are issued by the Division of Women's Activities, Department of Justice.

#### Pot Roast With Vegetables

3 or 4 pounds chuck roast  
1 cup sliced carrots  
1 cup sliced onions  
1 cup celery cut in bits  
1 cup sliced turnips  
3 tablespoons fat (preferably from salt pork)

If the meat is not sold in a solid piece, skewer or tie it into shape, wipe it with damp cheesecloth, and roll in flour. Boil vegetables in salted water to barely cover until soft. Rub through a coarse strainer. Heat fat in a frying pan or Dutch oven. Put in the meat and brown on all sides. If the frying pan is used, transfer the meat, after it is brown, to a kettle, unless the pan is deep enough to hold the beef. Pour the vegetables and their liquid over the meat, together with any preferred seasoning. Cover tightly and let simmer slowly for four or five hours, turning twice. Thicken the gravy a little, and pour over the meat.

#### Chuck Steak With Onions

2 pounds chuck steak  
5 or 6 onions  
Salt  
Butter or butter substitute  
Slice onions in water. Drain thoroughly. Place onions in a shallow saucepan, cover closely and cook over a slow fire for 15 or 20 minutes till tender. Use no water or fat, as the onions contain both moisture and richness. When the onions are done, uncover and brown slightly if preferred, but they are more digestible without browning. Heat a frying pan smoking hot, and brown the steak quickly on both sides; reduce the heat and turn the meat frequently

until it is cooked through. Season the steak and salt the onions. Serve the meat on a platter with onions around it. Add butter if desired.

#### New England Boiled Dinner

2 pounds corned beef  
1 small head cabbage  
6 small turnips  
6 small carrots  
6 small beets  
Potatoes

Wipe the meat and tie securely in shape. Put in a kettle and cover with cold water, bring slowly to the boiling point, boil for a few minutes, remove scum and reduce heat. Finish cooking at a lower temperature. Remove to hot platter and cook the vegetables in the liquid from which the meat has been removed. If too salty add hot water. Too much salt will wilt the vegetables and spoil the flavor. The beets should be cooked separately or canned beets may be used.

To serve: Place the meat in the center of the platter and arrange around it border of the various vegetables. Sprinkle with chopped parsley or garnish with sprigs of parsley. The head of cabbage should be cut in eighths after cooking.

#### Pot Roast of Mutton With Currant Mint Sauce

2½ pounds mutton (plate)  
Seasoning

Wipe meat, sprinkle with salt and pepper, place on rack in dripping pan, and dredge meat and bottom of pan with flour. Bake in hot oven for 2 hours, basting frequently with butter or butter substitute. Serve with currant mint sauce.

#### Currant Mint Sauce

Separate ¾ tumbler of currant jelly in pieces, but do not beat it. Add one to two tablespoonfuls finely chopped mint leaves and shavings from an orange rind. Serve around roast.

**Escalloped Corn Beef**

- 2 cups cooked corned beef, cubed
- 1 cup medium white sauce
- 1 stalk celery, chopped fine
- 2 slices onion, chopped

Cook celery and onion in sauce. Put the corned beef in a shallow baking dish. Remove celery and onion from sauce. Add sauce to meat. Sprinkle with bread crumbs moistened with melted butter or butter substitute. Brown in hot oven.

**Veal Cutlets and Soup**

- 3 pounds veal shank

Cook a veal shank in boiling salted water until tender. Remove as much meat as possible from the bone. Cut the pieces to resemble chops.

Take this veal and season well. Roll in crumbs, egg and crumbs again and saute in butter or butter substitute. Garnish with parsley.

For the soup take the remaining portion of the shank and put it into a kettle with 3 cups brown stock and a few peppercorns, salt, celery salt and other seasoning desired. Add  $\frac{1}{2}$  cup each of diced potatoes, turnips and parsley. Cook for one-half hour.

This veal shank provides a soup and cutlets for a family of five.

**Pork and Sauerkraut**

- 2 pounds spareribs
- 2 cans sauerkraut
- Seasoning

Wash spareribs and place in roaster. Bake in moderate oven for  $1\frac{1}{2}$  hours, after seasoning well with salt, pepper and any other additional seasoning desired. Heat the contents of 2 cans of sauerkraut. Arrange spareribs on platter and surround with sauerkraut.

**Baked Stuffed Flank Steak**

- Flank steak (about two pounds)
- 1 cup crumbs
- $\frac{1}{2}$  cup water or stock
- 1 teaspoon salt
- $\frac{1}{4}$  teaspoon pepper
- $\frac{1}{2}$  small onion chopped fine
- 1 small carrot, turnip
- $\frac{1}{2}$  cup celery

Wipe steak, remove skin and lay out flat for stuffing. Make a dressing of stock, salt, pepper, onion and a small amount of celery and spread on the meat. Roll with the grain so that when cut it may be cut across the grain of the meat. Place the diced vegetables in roasting pan and on this layer of vegetables lay the meat, and add two or three cups of water, depending upon size of pan. Cover and bake three hours, or until tender. When cooked remove meat and thicken broth.

**Beef Goulash**

This may be made from the chuck. Cut the beef into cubes or slices and sprinkle with vinegar and a little summer savory. Add a teaspoonful of salt, and half teaspoonful of paprika; cook six onions for each two pounds of meat, slowly, in one-fourth of a cup of butter or butter substitute. Add the cooked onions to the meat, cover tightly, and cook slowly for about two hours. The liquid may be increased just before serving by the addition of a little beef stock, or either sweet or sour cream.

**Savory Beef**

- 2 pounds beef cut in size for serving (use plate, shank, rump or round)
- 3 large onions sliced
- 3 tablespoons lard
- 3 tablespoons flour
- 1 teaspoon salt
- $\frac{1}{4}$  teaspoon black pepper
- $\frac{1}{4}$  teaspoon ground cloves and thyme or summer savory
- 1 pint brown stock or boiling water and meat extract
- 2 tablespoons vinegar
- 1 tablespoon catsup

Brown onions slowly in lard. Increase the heat. Add meat and brown. Mix the flour, pepper and other seasonings. Sprinkle this mixture over the meat. Add the stock, vinegar and catsup. Cover closely. Simmer until meat is tender, allowing two hours for shank

or plate and  $1\frac{1}{2}$  hours for rump or round.

#### **Browned Pig's Feet**

- 1 can beets
- 6 pigs' feet
- 1 egg
- $\frac{1}{2}$  cup crumbs
- Butter or butter substitute

Crumb the pigs' feet and brown in butter or butter substitute. Arrange in casserole and bake, basting with high grade table sauce and butter. Serve in casserole, having 1 can beets, which have been heated, surrounding the pigs' feet.

#### **Veal Pot-Pie**

- 2 pounds veal neck

Cook in boiling salted water until tender. Trim all meat possible from the bones. Add to white sauce.

#### **White Sauce**

- 2 tablespoons flour
- 2 tablespoons melted butter or butter substitute
- Salt and pepper
- $1\frac{1}{2}$  cup milk

Scald milk, then add the butter and flour which has been made into a paste. Add seasoning.

Make an ordinary biscuit dough and line a baking dish with this. Into the dish pour the meat and white sauce combined, and put a covering of biscuit over the top, being careful that there are small openings in the top for the steam to escape. Bake in a medium oven for 20 minutes. Serve with mashed potatoes, and peas.

#### **Swiss Steak**

- 2 pounds round or sirloin steak cut 2 inches thick
- $\frac{1}{2}$  cup flour
- Salt and pepper
- Mix
- 2 pounds round or sirloin steak cut  $2\frac{1}{2}$  inches thick
- Few slices onion
- $\frac{1}{2}$  green pepper, chopped fine
- 2 cups boiling water or 1 cup water and 1 cup strained tomatoes

Pound flour into meat with wooden potato masher or edge of heavy plate. Heat the fat. Brown the meat on each side in it. Add onion, green pepper, boiling water and tomato. Cover closely. Simmer two hours. This may be cooked in a casserole in the oven. Other vegetables may be added if desired.

#### **Hot Pot of Mutton and Barley**

- 1 pound mutton
- $\frac{1}{2}$  cup pearl barley
- 1 tablespoon salt
- 4 potatoes
- 3 onions

Celery tops or other seasoning herbs

Cut the mutton in small pieces, and brown with the onion in fat cut from meat. This will help make the meat tender and improve the flavor. Pour this into a covered saucepan. Add two quarts water and the barley. Simmer for one and one-half hours. Then add the potatoes cut in quarters, seasoning herbs, and seasoning, and cook one-half hour longer.

#### **Brisket With Onion Sauce**

Wipe the meat with a damp cloth, and tie it into a compact shape with strips of cloth. Place it in a deep kettle with boiling water (or part of the stock if possible). Add a soup bunch, several cloves and peppercorns. Simmer until tender, add salt when partly cooked. Take the meat from the liquid, remove the cloth, and place it in a shallow baking dish. Beat one egg and spread over the beef, then sprinkle with coarse crumbs, and brown under a flame or in a hot oven.

For sauce—for a three-pound piece of meat—cut up half a cup of green onions and cook these with two tablespoons of butter or butter substitute. Brown slightly. Stir in two tablespoons of flour, add a cup and one-half from the stock of brisket, and a tablespoon of minced parsley. Keep the sauce over hot water, or in a double boiler, until

the meat is finished. Pour the sauce over the meat and serve.

From left-over prepare beef croquettes. There should be enough left from this roll to prepare croquettes for a family of five for the second meal.

#### Quick Meat Loaf

$\frac{3}{4}$  pound round or some other solid meat run through meat grinder twice

$\frac{3}{4}$  cup softened bread

1 beaten egg

Salt and pepper

Lemon juice

A little nutmeg

Onion juice

added to bread

Add the bread mixture to the meat. Shape in a bowl and sprinkle well with flour. Melt two teaspoons of butter in a frying pan, put in a sliced onion, cover and cook slowly, until the onion is a light brown; remove the onion; put the meat loaf into the hot pan with the floured side down. Cover and cook for ten minutes, then sprinkle the top with flour, turn carefully, and cook for five minutes longer. Lift the meat loaf on to a platter with a cake turner, place the cooked onion on top and pour over the juice remaining in the pan. This meat loaf can be served either hot or cold.

#### Braised Ox Joints

1 ox tail (cut in two-inch pieces)

1 cup tomatoes

2 small onions

1 tablespoon chopped celery

3 whole cloves

3 bay leaves

2 tablespoons flour

Brown ox tail well in oven. Cut onion, carrot, celery and brown all together well. Sprinkle with flour and brown fifteen minutes. Add one cup hot water and tomatoes, bay leaves, cloves, salt and pepper. Cook until meat falls from bones.

#### Beef Balls With Dumplings

To a cup and a half of beef from the shank put twice through a food chopper, add a third of a cup of bread crumbs, salt, pepper, a teaspoonful of lemon juice, a little nutmeg and a beaten egg. Shape into balls lightly, and let them stand for half an hour or more to become firm, then roll them in flour and brown in the frying pan with three tablespoons of lard or some salt and pork fat. Then add a tablespoon of flour to the remaining fat and a cup of stock. Season well, add this mixture to the meat balls and simmer in a closely covered dish for an hour and a half.

#### Beef Brisket—Boiled and Browned

If the piece has much bone, part may be removed for soup stock, or for gravy to be used with the meat when warmed over. Cook the solid part of the meat until tender, with a little celery salt and garlic added, turning it once during the cooking, which will take from four to six hours according to the amount of meat. Remove meat from liquor; place in shallow pan with skin side up, and score several times across top. Have boiled potatoes (hot or cold) in readiness and drop into kettle to take up some of the fat; then place them around meat and brown all in a hot oven for about twenty minutes. Make a gravy with the remaining liquor and serve separately. The meat will slice as firmly as cheese, and will be tender and appetizing.

#### Irish Stew With Dumplings

2 pounds mutton (neck)

Carrots, turnips, and potatoes

Seasoning

Wipe and cut in pieces the mutton. Put in kettle, cover with boiling water, and cook slowly two hours until tender. After cooking for an hour add vegetables cut into small pieces. Thicken with  $\frac{1}{4}$  cup flour, diluted with water to form a paste. Season well and serve with dumplings.

**Ox Tail Soup**

- 1 cup ox tail cut into small pieces
- $\frac{1}{2}$  cup onions, cut fine
- $\frac{1}{2}$  cup finely cut carrots
- 1 cup diced potatoes
- $\frac{1}{4}$  cup barley
- $\frac{1}{4}$  teaspoon white pepper
- 1 tablespoon parsley or celery top
- 1 tablespoon caramel
- 1 tablespoon salt

The ox tail should be chopped at each joint, making the pieces from one to two inches long; wash well in two or three waters, put on to boil, with two quarts of cold water, add the barley and boil slowly for two hours; then add the onion, carrot, salt and pepper, boil for thirty minutes. Add the potatoes and boil for twenty-five minutes; add a little paprika, thyme, parsley and the caramel. Serve all with the pieces of ox tail. This makes a very nutritious soup.

**Planked Regular Roll**

2 $\frac{1}{2}$  pounds regular roll

Place the meat upon a well seasoned plank. Grease board well with butter or butter substitute. Place beneath broiler and broil for 2 hours, basting frequently with butter or butter substitute. Remove from broiler and finish roasting in moderate oven.

To garnish: Around edge of plank place border of Duchess potatoes. Duchess potatoes are mashed potatoes to which an egg yolk has been added. This mixture is forced through a pastry bag, forming rosettes around the roll. Garnish with canned peas and canned asparagus tips. Serve on plank.

**Beef Steak Pie**

- Chuck steak, cut in narrow strips
- Bit of garlic
- $\frac{1}{2}$  bay leaf
- 6 peppercorns
- Sprig of parsley
- 4 halved potatoes
- 1 onion stuffed with 2 cloves
- 1 cup sliced carrots
- 1 cup celery cut in strips

Tie in square of cloth

Place steak in a kettle with boiling water to cover, and let it simmer for half an hour. Add seasoning in bag together with salt to the meat, and thicken the stock. Place the kettle on an asbestos mat to keep sauce from sticking. Some dried mushrooms soaked and drained improve the flavor. Simmer while making the pastry. Then remove the bag of seasoning. Put all in a baking dish with a rolled crust over the top and sides. Brush with milk and bake forty minutes, covering it with heavy paper as soon as it is brown.

**Brain Rissoles**

- 2 cups brains (or 1 whole brain)
- $\frac{3}{4}$  teaspoon salt
- 2 tablespoons chopped green pepper
- $\frac{1}{2}$  cup thick white sauce

Put brains into a bowl of cold water with salt for thirty minutes, skin and remove fibre. Cook in water to cover fifteen minutes. Drain, chop, or put through a meat grinder, add seasoning and white sauce. Form into small balls; roll sheet of pie paste or short biscuit dough quite thin. Place the balls in a row equal distances apart. Place another sheet of paste over all. Stamp out with round cutter or cut them apart and press upper and lower crusts together. Bake in a moderate oven. Brown in deep, hot vegetable frying medium.

**Baked Pig's Head**

- 1 pig's head
- Biscuit dough
- Salt and pepper

Choose a pig's head and clean very well. Parboil. Pat out biscuit dough and roll pig's head in the dough. Bake until brown.

**Braised Beef**

Cut the meat which may be from the brisket, into cubes; brown in frying pan with drippings. Use strong heat—stir meat so it will cook quickly and not lose its juice. Tender cuts can be



cooked whole. Remove the pieces to a closely covered kettle that can be used on top of range (unless the oven is heated for other cooking). Rinse the pan with a  $\frac{1}{4}$  cup of boiling water to save all browned bits, and pour over meat. Cover tightly and cook slowly for two hours.

Prepare the following sauce and pour over the meat and continue cooking for another hour.

#### Sauce:

Chopped  
1 onion  
1 carrot  
Few sprigs parsley  
2 tablespoons butter or butter substitute  
 $\frac{1}{2}$  cup diced celery  
1 cup canned tomatoes  
Salt and paprika  
Melt fat. Brown onion, carrot in it.

Add parsley, celery, and tomatoes. Heat thoroughly. Add seasonings.

#### Stewed Beef Heart With Prunes

1 beef heart  
1 cup pitted prunes  
About  $\frac{1}{2}$  cup flour  
1 teaspoon salt  
 $\frac{1}{4}$  teaspoon pepper

Pour boiling water over beef heart. Let stand for ten minutes. Trim off fat and arteries. Cut in pieces for stewing. Dredge with flour and brown in a little fat obtained by trying out fat which was cut off. Place in stew kettle and pour over it enough hot water to cover, add the prunes soaked and pitted, season with salt and pepper. Stew slowly till tender. Take care that it does not burn. Will serve eight people generously.

#### Chopped Beef Au Casserole

$1\frac{1}{2}$  pounds clod of beef, ground  
 $\frac{1}{2}$  cup tomato relish  
Tabasco sauce  
1 can beets

Mix chopped beef with tomato relish. Add  $\frac{1}{4}$  teaspoon tabasco sauce (more if

desired). Season well with salt. Put in glass casserole and bake two hours, basting frequently with a high quality of table sauce. A few strips of bacon across the top of any meat loaf adds to its richness and improves flavor. Serve garnished with 1 can beets, quartered. Serves five people.

#### Fresh Pork, Parsnips and Carrots

1 lb. pork, butt  
4 large carrots  
4 large parsnips  
1 small red cabbage  
Seasoning

Cook pork in piece  $1\frac{1}{2}$  hours. Cook vegetables in same kettle until soft. Remove from kettle and finish cooking meat. Cut up pork into thin slices. Arrange side by side down the middle of a large platter. Around the meat serve the cabbage quartered, and vegetables cut into lengths. Serve with high-grade meat relish.

#### Smothered Beef

3 pounds of rump or clod  
3 large onions sliced  
3 tablespoons oil or drippings  
2 tablespoons mild prepared mustard  
Flour mixed with salt and pepper  
1 teaspoon celery seed  
1 cup strained tomatoes or  $\frac{1}{2}$  can tomato soup

Dredge meat with flour. Brown well in heavy pan. Brown onions in oil; add mustard, celery seed and tomatoes. Pour this sauce over meat and cook slowly three hours or more on top of stove or six hours in a fireless cooker.

#### ADRENALIN IN DIAGNOSIS

The new science of endocrinology has developed so rapidly that, in order to remain in the vanguard of the march of progress, the physician must needs keep himself informed on every phase of glandular therapy. In harmony with this idea we have directed the attention of our readers, on several occasions, to the series of instructive essays on Adrenalin that have been

appearing in the advertising section of this journal.

In the current issue we present a brief discussion of the use of Adrenalin as a diagnostic agent in hyperthyroidism and pancreatic diabetes, also as a test of suprarenal function. The technique of these tests is simplicity itself, and there would appear to be no reason why any practitioner should not avail himself of them in certain obscure cases in which a differential diagnosis by the usual means may be difficult or even baffling.

The preparation employed in making the tests is the original 1:1000 Adrenalin Chloride Solution of Parke, Davis & Co., upon the use of which for twenty years the literature of suprarenal therapy has been built up.

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Hemet, California,  
January 29, 1921.

Dr. George E. Malsbary,  
Editor Southern California Practitioner,  
Los Angeles, California.

Dear Doctor:

I am enclosing check for subscription to your journal for one year. Referring to the notice of the accident which I sustained on Nov. 20, 1920, appearing in the January issue, I am sorry to have to inform you that it was necessary to amputate the leg about 8 inches below the knee. I made a splendid recovery (due to the work of my surgeon, Dr. H. R. Martin of Riverside, Calif.) and shall soon have an artificial limb, when I hope to be as good as new.

Very sincerely yours,  
VERDO B. GREGORY

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Subscribe for the Southern California Practitioner, \$1.00 per year, 1414 S. Hope St., Los Angeles, Cal.

## TREATMENT OF HEMORRHAGE

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In the advertising section of this issue the reader will find the fourth of a series of little essays on "Adrenalin in Medicine," in which the topic discussed is "The treatment of hemorrhage." While most practitioners are more or less familiar with the therapeutics of adrenalin a perusal of this brief article will serve to refresh the memory of anyone who has momentarily lost sight of this remarkable and dependable agent in minor surgery. A notable point that may have been overlooked is that adrenalin not only controls bleeding by vasoconstriction, but it also shortens the coagulation period, whereby it occupies a distinctively unique position among hemostatics.

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# SOUTHERN CALIFORNIA PRACTITIONER

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## SHIPS THAT NEVER REACHED THE HARBOR\*

By WALTER LINDLEY, M. D., LOS ANGELES

Mr. Toastmaster, Fellows of the Los Angeles County Medical Association and Guests:

Tonight I realize that I am very human. This expression of good feeling towards me stirs me throughout. Friendship has been a great feature of my life and the personal greetings I have had here this evening make me realize that life is worth living.

I am in the position of a man who said:

"John, I never realized so plainly before that I am growing old."

"What, are you suffering from rheumatism?"

"No, worse than that, I am suffering from reminiscences."

I was just twenty-three when I landed in Los Angeles with \$10 and a diploma, and I still have the diploma. As I walked up Commercial street, then our city's chief business thoroughfare, after having landed at Commercial and Alameda streets from a train that had brought me from San Pedro, I had, from that very minute, the same confi-

dence and faith and belief in the future of Los Angeles that I have today. Then it was a Mexican Pueblo with 6,000 people; today it is an American city with 600,000 people, and yet we can feel that the future development and growth of Los Angeles is just before us the same as it was in 1875.

A few years ago, Mrs. Lindley and I were on the good ship Sonoma, going to visit the Panama Canal, which was then nearing completion. It was a beautiful night in tropical waters. The Southern Cross could be seen overhead; while on deck there was dancing and lovely languorous music. The sea was like a mirror, and when, from time to time, the music stopped, the gentle lapping of the waters of the great Pacific could be heard against the side of the vessel. One would naturally say, Oh how beautiful it is to be out on the ocean; forgetting, for the moment, that the floor of the ocean was almost covered with the wrecks of ships that had never reached the harbor.

It is something the same in looking

\*Address delivered at the banquet given on the Fiftieth Anniversary of the Los Angeles County Medical Association January 3, 1921, on which occasion Dr. Joseph P. Widney, Dr. Joseph Kurtz and Dr. Walter Lindley were guests of honor.



upon the life of a man who is approaching the sunset of his career. Everything looks placid and comfortable and as though that life had to some extent been a success. Yet, in the course of every man's life, there have been many of his ships that never reached the harbor.

When I was a medical student in Philadelphia, attending Keen's School of Anatomy, conducted by Dr. W. W. Keen, who has for a long time been the great American Nestor of Surgery, I usually went to lunch down in a cellar where I got a bowl of soup and all the bread I could eat for five cents; for dinner I often invested as much as twenty-five cents. Yet, during those days I had a great ambition to get the education that goes with securing the degree of Bachelor of Arts, but the financial pressure was so great that I had to give it up. Even after I came to Los Angeles, I had the hope to spare two or three hours a day and attend the University of Southern California and get that education, but the demands on me were such that I finally had to give it up, and that ship never reached the harbor.

As a youth, Victor Hugo's "Les Misérables" had filled me with enthusiasm; especially had that one sentence taken a firm place in my thoughts: "The Divine spark is in every human being."

In my early years in Los Angeles, and especially during my service as member of the city board of education, I was impressed with the number of boys who were delinquents; many of them real criminals, and with the fact that there was no provision for endeavoring to make good citizens of them. The idea took possession of me that if we could only have a school where they would be given a good practical education; be taught some trade, and be surrounded with kindly influences, that we could make good citizens of these wayward boys.

After years of bombarding the public through the newspapers, an appropriation was secured and the state school at Whittier was established. But after we had three or four hundred boys in that institution, I discovered that only about 15 per cent of them had normal minds and that 85 per cent had more or less defective mentalities.

It was impossible to make useful, efficient citizens out of boys with defective minds. Many were the instances where everything would seem to go right with a boy and then suddenly the defective mind would show itself and failure in making a good citizen was the sequel. While it is necessary to have such institutions for the care of these unfortunate boys in order to make of them the best men possible, yet the good of high citizenship cannot be reached with such material, and consequently that ship never reached its intended harbor.

One summer, that splendid surgeon, loyal citizen and friend, the late Dr. F. T. Bicknell, and myself went up into the San Jacinto Mountains to spend our vacation. We were carried away with the beauty of the forests, the music of the birds, and the refreshing breezes from the desert, and both of us enthusiastically took up the idea that here would be a great place for a sanatorium for the tuberculous. We remembered that Celsus, two hundred and fifty years after the birth of Christ, had said:

"Soon as a man finds himself spitting and hacking on rising in the morning, he should immediately take possession of a cow, and go high up in the mountains and live on the fruit of that cow."

Consequently, before our vacation was over and we had turned our faces homeward, we had taken options on many acres of that mountain territory. When we came back and told our story to our friends, especially to our medical confreres, we found our proposition was



almost invariably received with enthusiasm and we all joined together to establish that institution which our visions had pictured.

We soon learned that while a very respectable number of people went there for treatment, yet that its inaccessibility kept it from being very popular, and then a fire came along and wiped out our principal structure, and after a few years' endeavors, a deficit of \$125,000 was ample proof that that ship never reached the harbor.

A quarter of a century ago there were no systematically organized schools for nurses in Los Angeles. Dr. Francis L. Haynes, in his surgical work, made a specialty of training nurses for his own service. He published for their use a small but valuable book called "The Primer of Nursing." As all of the hospitals were so small, I conceived the idea of organizing, under the medical department of the University of Southern California, a training school that would give the didactic work for all the Los Angeles hospitals, thus improving the quality of the instruction and preventing duplication. Dr. Joseph Kurtz joined me very heartily in this work, and we organized, secured a charter and went along very satisfactorily, graduating a class of five nurses at the medical college on June 4, 1898.

I remember, Dr. Geo. L. Cole delivered the address and Miss Fannie Wills gave out the diplomas. After going on fairly well for a while, we found that there was considerable friction between the hospitals that were then developing and deemed it best to allow each hospital to have its own training school. While I still believe that the idea was a good one; yet that was another instance where the ship never reached the harbor.

Several decades of life in Los Angeles had deeply interested me in many directions as to its problems, growth and prosperity. I had noticed that the ten-

dency was to put the best parks and the best advantages in almost all directions, in the best part of the city, and visions came to me that if we could put more parks, the city's breathing places, in the poorest parts of the city and have libraries and reading rooms and coffee houses plentifully scattered amongst those people who needed them the most, we would have a much more desirable city. These and other allied matters that came into my mind gave me the hope and ambition that I might be mayor of this place in which my life was being spent. Finally, the party to which I belonged made me its nominee. Everything seemed to be going along favorably until one day I received notice that the organization which represented the brewers, saloon keepers and distillers wished to have a committee meet me.

I consented, and can see that formidable committee of alcoholic grandees sitting around me in my office. Their spokesman then announced that they were very friendly to me, but what they desired in order to support me was that I should allow them to name the police commission. I told them that if I were to agree to that, then they would be the mayor of the city instead of me. That my aim was, in the event of becoming mayor, to give them every protection under the law, and that on the police commission I would name and try to secure the services of such men as Major E. F. C. Klokke, Dr. Joseph Kurtz and others who were known to be both liberal and law abiding citizens. But that would not satisfy them, and finally, with due solemnity, they marched out, and that ship never reached the harbor.

In passing from this point I want to say that there are a number of us sitting around this banquet board tonight who would have enjoyed at the beginning the added piquancy of one or two cocktails, but we had better give up

our cocktails forever than to again see the brewers, saloon keepers and distillers control the politics of our fair city.

Thirty-six years ago, when Los Angeles had a population of about fifty thousand, I realized that to do its part towards the upbuilding of the city, the medical profession should have a monthly journal. After talking the matter over with Dr. Widney and Dr. Kurtz, we decided to establish a monthly publication, and on January 1, 1886—thirty-five years ago—the first number of the Southern California Practitioner appeared. While publishing scientific papers that were read at our medical society meetings and endeavoring to keep abreast with the news of the progress of the profession, the Practitioner felt that its main object should be the publication of papers in regard to the climate of Southern California and Arizona, and, as a result of this policy, many of the best papers on our climate are to be found in the files of the Southern California Practitioner.

In 1890, Doctors H. Bert Ellis and Frank Bullard took over the publication and editing of the journal, and carried it on very ably for several years.

In 1897, I again took the journal on my shoulders and proceeded with its publication, but not being able to give it the time necessary, I realized that it was best to again surrender its control, and, with much regret, I was obliged to see that this was another ship that never reached the harbor.

About ten years ago, Dr. Geo. E. Malsbary took it over, and since that time he has given much time and, I regret to say, considerable money, which he could ill afford to spare, towards sustaining our journal. Dr. Malsbary is doing this simply through patriotism and loyalty to our city and to the profession. The Southern California Practitioner in all of these years has never failed to appear for a single issue, and

is the oldest medical journal west of Chicago. There is no doubt but the profession should get back of Dr. Malsbary in this work that he has undertaken and help him to make our monthly journal a credit to the city and a credit to Southern California. Dr. Malsbary is ready to do anything to improve the journal and improve Southern California.

If the Los Angeles County Medical Society wanted to appoint a committee to co-operate with him in the control and editing of the journal, he would welcome it, or if the society wished to take over the Practitioner entirely, he would agree to that no doubt, providing its continuous publication was assured.

It was in 1884 that Dr. Widney first spoke to me in regard to the necessity of having a medical college in Los Angeles. He said that if we did not occupy the field, irregulars would. At that time there were but two medical colleges in the United States requiring a three years' course, all other colleges only required two years course.

Dr. Widney and those of us who were consulting with him in the matter, agreed that this new college should not go out soliciting large classes, but should begin by placing the standard high and requiring a three years course. Thus, in 1886, a medical department of the University of Southern California opened its doors for students.

We had a complete and earnest faculty—and began, I believe, with fourteen students. In that class were men who became eminent in our profession, several of them have reputations that are national and at least one gained an international reputation in his chosen specialty.

Today it is the cry that all professors in medical colleges must be paid a considerable salary. In this Los Angeles college, the faculty, instead of receiving salaries from mouth to mouth,

paid in considerable stipends. It was the aim of each member of the faculty to not only improve himself, but to do good conscientious work for the students, and also, possibly primarily, to assist in building up Los Angeles as an educational center.

With the fees from the students and the money paid in by the members of the faculty, we accumulated at least \$50,000 worth of property. President Bovard of the University of Southern California, a man of wonderful executive ability, was with us constantly in spirit and every way that he could help us personally, but at that time the University of Southern California had to husband all of its financial strength in order to build up its college of liberal arts. Some members of the faculty acquired the idea that if the fealty of our medical college could be transferred from the University of Southern California to the University of California, with the great wealth of the state back of it, that our institution would get much additional financial aid; consequently, the institution was taken bodily from our local university and handed over to the University of California.

It had not been realized that the board of regents of the University of California were almost all from north of the Tehachapi. It was perfectly natural for that overwhelming northern majority to bend every effort to strengthen the medical department of the University of California located on the bay, and neglect the little institution for which we had worked so many years down here in the "cow counties" of Southern California. Therefore we soon noticed a lack of financial oxygen, resulting finally in complete suffocation; and, as a result of this unneighborly policy, there was soon no under-graduate school of the Los Angeles Medical Department of the University of California, and that ship never reached the harbor.

Meanwhile another medical college had been started in Los Angeles, and President Bovard had been induced to co-ordinate it with the other departments of the University of Southern California. For years, under Dr. Bovard's wise policy, it did good work, and for the last few years as high as twelve of its instructors were receiving living salaries. Such men as Dr. Granville MacGowan; Dr. W. W. Richardson; Dr. F. M. Pottinger; that wonderful teacher of anatomy, Dr. H. O. White, and others whom we could mention with pride, were instructors in this institution. It was popular with the profession, and graduated, from year to year, men whose after-record would have been a source of congratulations to any Alma Mater.

Many of them served as medical officers during the war, and the University of Southern California could justly boast of both their patriotism and professional attainments; but, notwithstanding all this, there was a spirit abroad, originated by the Rockefeller Foundation, fostered by the Educational Council of the A. M. A. and abetted by the powers that be in San Francisco and vicinity, that laid down the law that a medical institution must not be recognized by the character, ability and loyalty of the men who did the teaching, or by the proficiency and usefulness of the men that it graduated, but that it must be graded according to the amount of wealth that was back of it. The same institutions and coteries demanded that, unless a medical college had wealth to the amount of at least two millions of dollars, that it should be graded as a second class, or class B institution. It was the pressure from this same spirit that caused Bowdoin, with its historic record, to recently close its doors.

President Bovard said that while the Law College, the Dental College, and the College of Liberal Arts of the Uni-

versity of Southern California had over 5,000 students, that he could not permit them to be allied to a medical department that was graded as class B, and therefore the life of this institution was thus snuffed out.

This Los Angeles County Medical Association should be to the development of medical education in Southern California, as the Chamber of Commerce is to the development of the commercial and industrial life of our chosen home.

We see Los Angeles without any university medical college, giving 35,000 majority in favor of the chiropracties and osteopaths. We see San Francisco, with its two great university medical

colleges, giving a great majority in the recent election for scientific medicine. Therein lies a lesson.

I am not for a minute discouraged with the outlook; some man, some medical Frank Wiggins, will surely rise from our midst and lead the medical profession and intelligent people of all walks of life into an organization that will co-operate with President Bovard in again developing a great medical college, so that even Dr. Widney, Dr. Kurtz and myself, before we are called to that "undiscovered country," will have the joy of seeing the great ship Medical Education, with its banners of triumph flying from the mast, victoriously enter the Los Angeles Harbor.

## APPENDICITIS IN CHILDREN\*

By GUSTAV BIORKMAN, M. D., LOS ANGELES

I feel highly honored to be allowed the privilege of addressing a few remarks on the important subject of appendicitis in children to so critical a body as the Southwestern Pediatric Society.

The data for these remarks are largely culled from recent literature and from a limited experience in two Eastern hospitals during 1918 and part of 1920. The conclusion of my little study leads me to emphasize the fact that appendicitis in children is a far more formidable enemy to child life than to the adult human being, and I will cite authorities who firmly believe that the inflammation of the vermiform appendix is very often missed in diagnosis, and when unwisely operated upon at the inopportune stage carries with it a mortality rate about 25 per cent.

It may be fairly conceded that early recognition of appendiceal inflammation, and operation of mild cases, would probably halve the mortality in children with this disease as it has in adults.

If we bear in mind the truth of Dr. J. P. Crozer Griffith's statement in his book on diseases of infants and children—that the symptoms of appendicitis are sometimes very striking; sometimes recognized only with difficulty and uncertainty. In some instances they progress slowly and with no constitutional involvement; in others, perforation with septic peritonitis comes almost as out of a clear sky; then, we may keenly appreciate the necessity of an everlasting vigilance against this marauder on happy childhood.

Appendicitis in its early stage is more difficult to diagnose in children for the reason of the frequency of gastro-intestinal disturbances, intestinal parasites and other diseases of childhood,

which give rise to abdominal symptoms. The onset may be sudden or insidious as in adults.

In patients with abdominal pain I always think first of appendicitis until it is demonstrated by the history and physical examination that the so-called cramps are due to another cause.

It is necessary to familiarize oneself with abdominal catastrophies, or other conditions which demand immediate recognition for the salvation of the patient.

In the diagnosis, pneumonia in its early stage, with its referred abdominal pain, may be difficult to differentiate from appendicitis. Intussusception, tuberculosis, peritonitis, typhoid fever, incomplete hernia, etc., all require careful consideration.

Enterocolitis, and so-called toxemia, may in some instances simulate appendicitis, as may Pott's disease, right side renal or ureteral calculi.

I would call your attention to a few diagnostic points which I have found of great value:

The child is almost invariably restless at night, constipation is much more frequent than diarrhea. When the latter condition is present the abdominal tenderness is not usually confined to the right lower quadrant. I think that very few cases are free from temperature at some time. A child with appendicitis will not voluntarily sit up in bed, and objects to being lifted. The face generally is pale, not red, even with fever. Abdominal palpation is painful; rigidity indicates immediate operation. Suter, in *Correspondenz-Blatt für Schweizer Aertze*, March 29, 1919, remarks, that blunders in the diagnosis of appendicitis are more common in children than adults. In five cases de-

\*Read before the Southwestern Pediatric Society, March 7, 1921.



scribed, the symptoms deceptively simulated appendicitis and the child was to be operated on in the morning, but morning showed unmistakable diphtheria, or mumps, or the operation revealed ileus from a kink, or a gravity abscess from spondylitis. In other cases acute catarrhal enteritis or fermentation dyspepsia was responsible for the symptoms. One boy of twelve returned fifteen months after an operation for coxitis, the symptoms indicating return of the hipjoint disease until discovery of a tender resistance above the right Poupert ligament, and the operation revealed a gangrenous appendix.

It is unusual to see a pathological appendix in an infant under one year, but not at all uncommon to find decided changes in the appendix of older children who give no history of definite attacks.

From the fact that apthological changes are not uncommon in grown children in whom no history of acute attacks is obtained, one of two deductions may be drawn: either there were no acute attacks or they were not diagnosed. It is far more probable that there were acute attacks of a mild nature called "bilious spells," constipation, worms, teething, indigestion, etc. These correspond to the mild or moderately severe attacks in adults which are now commonly recognized and cured by operation. This readily explains the higher mortality in children, as in general, only the more serious cases are diagnosed and operated upon. This was true of adults also twenty years ago, and the results would about compare with those in children today. General peritonitis, huge abscesses, ileus, etc., were the regular occurrences at that time, as, to a considerable degree, they are still in children.

The correct diagnosis is seldom made, and operation for chronic, interval, or mild cases during childhood is exceptional.

Many cases are overlooked entirely, and, on the other hand, many other conditions are first diagnosed appendicitis, thus showing the great need for better diagnosis of this acute and serious condition.

**Catarrhal appendicitis** may be so mild that it is not recognized at all and is supposed to be a mere digestive disturbance. In other cases the symptoms are more positive. In general this form of the disease develops as a primary affection or consecutive to some digestive disorder, and is ushered in by colicky pain in the right iliac fossa, or elsewhere in the abdomen, this constituting the principal symptom. With this are often combined nausea, vomiting, moderate fever of 100 to 102 degrees Fahrenheit, loss of appetite, coated tongue, and constipation or sometimes diarrhea. All these vary with the severity of the case. Examination reveals tenderness, increased resistance in the cecal region, and often in one or two days an induration which can be discovered by palpation. A distinct tumor can be palpated, too, when there is a plastic exudate upon the serous surface of the appendix and neighboring parts.

**Suppurative appendicitis** is marked by the evident constitutional involvement, the rise of pulse-rate, and perhaps of temperature, the appearance of the face and other symptoms pointing toward a moderate degree of septic poisoning. These symptoms, in some cases develop slowly, and in other cases very rapidly. These symptoms may continue for several days or they may subside promptly, and lead to the conclusion that recovery is about to occur. Then in from two to four days from the onset, perforation may take place.

The symptoms of suppurative appendicitis vary, whether with or without perforation. In those non-perforative cases in which a localized plastic peritonitis also occurs, a very decided

tumor can be detected on palpation. Fever may continue or subside and the symptoms are less severe than in the cases in which a walled-in abscess forms about the appendix. In these latter, vomiting tends to persist, tenderness and resistance are decided, pain is variable but usually severe, and tympanites is common.

The constitutional symptoms of suppurative appendicitis: temperature varies in different cases and is not characteristic. The pulse becomes rapid and weak, and the general sensations and appearance of illness increase in proportion to the degree of septic absorption occurring.

Perforation into the peritoneal cavity may take place from a gangrenous appendicitis which has formed no adhesions, or from a periappendicular abscess which has finally burst the retaining wall. It is characterized by the occurrence of vomiting, or an increase of this if already a symptom; severe abdominal pain; and profound collapse with the usual signs of rapid feeble pulse, shallow respiration, and fall of temperature. The expression of the face is anxious and pinched, cold perspiration occurs, the abdomen is extremely tympanitic, and the liver-dullness much diminished. Death may take place without any reaction, or the temperature may rise rapidly even to hyperpyrexia and the symptoms of septic peritonitis develop. The signs at this period may, however, be very deceptive, especially in children, there being sometimes only a moderate depression of temperature, with apparent improvement in the general symptoms attending the beginning of septic poisoning.

The symptoms of gangrenous appendicitis are very misleading from the beginning. The early ones are not characteristic and are often no more severe than those of catarrhal appendicitis. Suddenly after a few days illness, perforation takes place, with the symptoms

of this as described. In other cases of gangrene the local manifestations are severe from the onset with unusual tenderness, pain and resistance of the abdominal walls.

**Appendicitis in infancy** exhibits symptoms which are liable to be very misleading. Doubtless many cases are entirely overlooked. The disease may exhibit a slow or sudden onset, troublesome vomiting, diarrhea or constipation, more or less fever, and finally peritonitis.

#### **Recurrent and Chronic Appendicitis:**

There is a very decided liability to the occurrence of repeated attacks of acute appendicitis. Such recurrences may finally lead to a severe and fatal appendicitis; or the disposition to them may at last disappear, perhaps through obliterative inflammation of the appendix. It is a mistake, however, to assume that recurrences must necessarily come after the first attack. One writer estimates the liability to recurrence as at least 23 per cent, as shown in one analysis of 250 patients of all ages.

This condition of recurring attacks may be regarded as one of the forms of chronic appendicitis. Some cases of repeated attacks of vomiting of the recurrent type probably owe their origin to actual appendicitis.

**Diagnosis:** The principal diagnostic symptoms in typical cases are sudden onset; early vomiting and fever; and abdominal pain, tenderness, increased resistance, and later induration or tumor, especially in the right iliac region. But the variations as already described are so great that diagnosis is often difficult, and the early distinguishing of the different forms of appendicitis from each other is practically impossible. The diagnosis in infancy is usually only conjectural.

A number of other morbid conditions are to be taken into consideration in reaching a conclusion. Appendicular colic, in which the contraction of the

appendix in expelling retained secretion fecal masses causes pain, is unproductive of fever, tenderness, leucocytosis, or the constitutional disturbance which appendicitis usually presents. With fever the diagnosis is at times uncertain. **Intestinal colic** may cause peculiar difficulty if there happens to be a large fecal accumulation in the colon, particularly the cecum. Acute **febrile indigestion** closely simulates many cases of appendicitis at the onset, and diagnosis at first may be impossible. Generally, however, the pain is less intense and the constitutional symptoms less marked except that the fever is often high. **Intussusception** might simulate appendicitis in the presence of constipation and of tumor. General symptoms, however, are absent early in the disease and appear only later; while appendicitis is ushered in by fever, vomiting, and other acute manifestations. **Ileocolitis** may resemble appendicitis and at first cause confusion, but the symptoms in general are so different that the diagnosis soon becomes clear. I have seen **acute tuberculous inflammation of the lymph-glands near the cecum** resemble appendicitis so closely that operation was performed with the mistaken diagnosis. Many similar cases are on record. The subject has been reviewed by Gage (Boston Med. & Surg. Jour., 1915). **Typhoid fever** may, at the onset, suggest appendicitis to a certain extent, through the vomiting and tenderness in the right iliac region; but the course of the temperature, the absence of leucocytosis, and later the presence of the Widal reaction serve to differentiate. The diagnosis, however, is sometimes very difficult, and the author has seen children with typhoid fever operated upon for appendicitis. The occasional reference by the patient of appendicular pain to the region of the right hip may cause the diagnosis of **hip-joint disease** to be made. Careful examination of the hip will prevent

the mistake. The error of believing a **pleurisy** or **pneumonia** to be an appendicitis is probably much more frequent than ordinarily supposed, and has repeatedly led to operation upon perfectly normal appendices. A mistake in diagnosis is to be avoided chiefly by careful examination of the lungs if appendicitis is suspected; by noting the increased rapidity of respiration in pneumonia; and by the fact that the abdominal resistance is generally relaxed during inspiration in this disease, but is maintained in appendicitis.

I may say that I have experienced the keen diagnostic pleasure of having had to send three children to the medical division at the Children's Hospital in Boston after being roused out of my midnight slumber, because of the kiddies having been wrongly labeled acute appendicitis.

You all know how often the internists in our field invokes the aid of the pediatric surgeon and you may appreciate how magnificent he must feel when refusing to operate.

Other conditions sometimes mistaken for appendicitis are: **Ovarian disease**, **Meckel's diverticulum**, and pain in the right iliac region caused by too ardent and often repeated palpation. Urinary symptoms may usher in appendicitis and cause confusion.

I have met a case of a boy eight years of age with an undescended testicle of the right side, with severe pains in the right lower abdomen, simulating appendicitis.

My first appendectomy performed under personal supervision of Dr. W. E. Ladd in Boston turned out to be a mesenteric cyst as large as a hen's egg and palpable right under McBurney's point.

At the Children's Hospital in Boston it was the standing rule to operate all appendix cases at once, day or night, if no more than forty-eight hours had elapsed since the first symptoms. If

later than this, the surgeon in charge waited, unless his hand was forced, three or four months until all tenderness and resistance had disappeared.

Non-surgical treatment is that indicated for catarrhal appendicitis, and the majority of such cases will recover. In view, however, of the impossibility of determining whether a case is catarrhal, suppurative, or gangrenous, the only

safe treatment is operative interference.

Appendicitis in children is a serious condition, and appendectomy a serious operation not to be undertaken lightly, since its mortality may be as high as 25 per cent in late cases, as reported by Suter of Basal, Farr and Drachler of New York.

### MEDICINE'S PART IN RECONSTRUCTION\*

By Rexwald Brown, M. D., F. A. C. S., Santa Barbara, California.

Destructive and agonizing as the years of war have been, nevertheless, from the conflict has come a marked sharpening of mankind's mental processes. The horrific sufferings of the nations have stimulated the brain cells of the peoples and we are living in a period of a very riot of thought. The foundations of our social fabric are being analyzed by all classes; political and economic grooves in which the races have traveled for centuries past are being pitilessly assailed by barrages of speeches and writing from intellectuals and others less schooled in clear thinking. Yet it is not a time for pessimism and fear. The old established order of things has apparently run its course and the world is passing in travail and bitterness into a better state of affairs, where there will be more sanity, more happiness, a greater justice, and a greater love one for the other; in short, definite progress along the road of human brotherhood.

The present era is to be one of reconstruction and readjustment. All the activities of existence will undergo change. Those who are unafraid in the midst of the present unrest, alarming though many of its manifestations are, envisage in the years to come a society which bears fruit other than individual greeds, national aspirations of acquisi-

tiveness, class caste and antagonisms, wars, famine and disease.

Theories and methods for world betterment fill the literature of the day. New journals appear in all lands, the mouthpieces of organizations and cults who feel they can lead the peoples into the paths of political righteousness and economic happiness. Weird, strange, reeking with bitter passion, and lacking in any approach to a real human brotherhood as are many of the expressed viewpoints, howsoever, we should concede that the intentions are in the direction of a social well-being which is believed not well established at the present time.

Other minds propound courses of action that seem rather more reasonable with possibilities for real achievement—they point a way to help lighten the burdens which civilization carries.

Into this turmoil of conflicting opinions, advice and suggestions the medical profession feels it has as supreme a right to toss its convictions and beliefs concerning a better world in which to live as have philosophers, scholars, statesmen, captains of industry, labor leaders and all others who think and act.

The majority of physicians believe that scientific medicine has a really great fund of knowledge which it has

\*Read before the Santa Barbara County Medical Society, January 19, 1921.



been unable to apply because of the indifference of mankind. If the knowledge could be placed into active service unquestionably society would make a definite step forward toward the contented state it seeks. This knowledge could flow in two streams, one preventive medicine, the other a more intensive application of diagnostic and therapeutic measures in specific cases of illness. Preventive medicine needs no introduction. The public realizes to a limited extent what this branch of professional effort has achieved in keeping mankind protected from the ravages of disease. Yet its achievement is relatively small compared with what it might be. Epidemic diseases, excepting perhaps influenza, are becoming well controlled, but is it not appalling when one reflects on the hospitals, asylums, poorhouses and penitentiaries which are maintained at costs comparable to war expenditures for physical and mental wrecks brought to such states by the non-operation of the forces of prophylaxis?

Scientific medicine has the knowledge to keep humanity comparatively well. It has accumulated a wealth of resources which if drawn upon by the public would insure health and strength—a virile race. Preventive medicine is concerned in the protection of the mentally and physically fit. Its function is to obliterate disease-breeding factors in our surroundings.

The world is not fully awake to this latent power in medicine. The medical profession labors with perhaps not sufficient concert and insistence, to incorporate its knowledge into the social fabric. But the suggestions do not compel that attention which means action. If the peoples were attuned to benefits very easily attained, long since departments of public health, of sanitary science, would have been established in state and national governments with powers adequate to their worth. The wish to be well, surmounted with efforts to keep

well, must spring from mankind itself, and when it does in large measure then will the medical profession be found willing and helpful counselors and guides.

Collaboration between the people and the medical profession is essential to real accomplishment in scientific medicine's greatest aim, health promotion. But in this sphere of society's rebuilding, it is likely that years of education will be necessary ere the requisite organizations are created to insure the accomplishment.

There is, however, another field of labor in which medical men have expended most of their energies for centuries past, the field of analysis and treatment of sickness in the individual. Splendid have been the victories, the accomplishments in the control and cure of disease. And in this field physicians will continue to put forth sterling effort until that wondrous period when preventive medicine will have gained ascendancy and people shall stay well in conformity with laws of health.

The practice of medicine to the present times has been very largely an individual relation between the person sick and the physician. It is now being questioned if that individualistic method renders to the patient the complete service which should be his. When one who is sick places himself in the care of a physician it is his trust that he will receive attention commensurate with modern medical knowledge. It is hardly possible that any physician, however extensive his learning and great his attainments, can be equal to the ramifications of the present-day knowledge in diagnosis and treatment.

And yet this aggregate knowledge should be available to the sick. It must be said that in general such is not the case. And continuance of the system of individualistic practice will withhold from suffering humanity that help to which it is rightly entitled.



The widened outlook on disease and its management has created specialists who devote their attentions to various parts of the body. Specialism in medicine has achieved brilliant results. By far, though, the larger number of doctors are general practitioners in active competition with each other for patients. In the hearts of most physicians—those who love their profession above mere money-making—there is an open or silent rebellion against the waste and inadequacy of the competitive system. Two evils stand prominently forth: One, the busy physician is unable to find time to keep up with the rapidly increasing developments in all departments of medicine and consequently is not conversant with valuable measures which could be applied to his patients; and the other, because patients insure a doctor's living, he does not feel justified in turning them over for treatment to another, even though he realizes he is more or less unequal to the confidence given him by the patients.

How can the ever-increasing resources of medicine be made wholly available to the needs of the ill? By the creation of more specialists? Partly, yes. But specialists often tend to a restriction of vision, absorbed as they are in their own fields. In treatment of conditions in which they have become expert, often are overlooked general conditions to which the local are very subordinate. The patient is frequently not materially benefited.

The grouping of specialists is the solution. The war has demonstrated convincingly to thousands of doctors that group medicine is a rational and efficient method of practice. The splendidly thought out and executed plans of organization of the medical corps of the different armies made specialists in the various branches of medicine and surgery of average general practitioners

brought into the service from civilian life. In the great army hospitals the care of the sick and wounded soldiers was not conducted in a haphazard manner. The work was so organized that any soldier, according to his needs, could have focused on his case a specialist or specialists versed in special knowledge. The case may have been simple, requiring but one or two specialists in its management, or very complex, demanding the collaboration in its analysis of all those giving exclusive attention to disease of some one part or group of organs of the body. That spirit of co-operation and unity assuring maximum value to the ill soldiers should be carried over into civilian practice that the civilian sick could, too, have the utmost in service of which modern medicine is capable.

A somewhat loosely organized group practice is existent in the medical school dispensaries and out patient clinic departments of hospitals in the larger American cities. Only a certain class of population, the very poor, receive the benefits from these groupings. The comfortably well off people in America are able to avail themselves of the service of two groups, more or less widely known to the general public. These are the Mayo group at Rochester, Minnesota, and the Johns Hopkins Hospital group at Baltimore. These well-knit organizations, especially the Mayo, give relief to many thousands of afflicted. Yet only a very small proportion of the well-to-do sick are able to reach these clinics for numbers of reasons, one being that disease is often of urgent nature and travel might be fatal. The Mayo group having pointed the way, it is not unlikely other groups of similar nature will organize, and be able to draw patients from more or less wide areas.

But still unserved, as they have a right to be, equally as well as the rich

and poor, are the ill members of the body politic who are classified as the people in moderate circumstances. Free dispensary clinics are not open to them, nor are they as a rule able to travel any long distance to a group they might elect were their circumstances better. And the people of moderate means are the masses, and of the ranks of the sick the greatest number are naturally from the masses.

Organization into groups of the average well-trained general practitioners in the various cities of America will go far toward securing to the people of moderate circumstances, and also to the rich and poor, the complete and scientific attention their ills give them the right to demand from the storehouse of modern medical knowledge.

Just what would this grouping mean to the physician members of the group? Their interest in treating the sick would be pooled and co-ordinated. Each one would elect to follow a particular branch of medicine; one, internal medicine; another, diseases of children; the next, diseases of women; again, surgery; and so on through nose and throat diseases, eye disturbances, and a number of other branches. Each doctor would develop into a specialist. Freed from the burdens of general practice, he would become increasingly efficient in his special work because of more intensive application to that one work.

What would be the advantages to patients? Each patient seeking relief from illness would have his condition completely canvassed through one suite of offices for one fee by physicians who together are conversant with and able to apply to individual needs the resources of present-day medicine.

This plan of group medicine presents constructive possibilities. As the groups become a definite factor in the civic life their influences would tend naturally to harmonize with the great

work of hospital standardization now being instituted by the American College of Surgeons. By "Hospital Standardization" is meant organization in the hospitals of America along such lines as will secure to all patients within its doors modern, safe, scientific treatment, and will prevent the use of measures considered unwise by general medical opinion.

Another possibility suggests itself. As the people find group practice renders them the utmost in service, individualism in practice will grow increasingly smaller. In time each community will find that one or more groups will satisfactorily serve its needs. Some central organization can then estimate the approximate number of new medical graduates who will be needed yearly from the medical schools of the country. Means could probably then be found to direct the proper number of medically inclined students into the professional schools. There is no question but that America is over-provided with physicians, and there is not sufficient practice for many of them, or adequate financial return from the practice to many others to enable them to keep abreast of medical advances. As a reasonably accurate estimate of the needed number of matriculates could be made each year this would help to solve the problem of too many medical schools, even now considerably decreasing in number through the survey made by Dr. Pritchett, of the Carnegie Foundation, assisted by the trustees of the American Medical Association.

The groups would serve another purpose. They could be made post-graduate schools of instruction to the fledgling M. D.'s, who would be later absorbed, if they made good, into the groups as vacancies occurred through death or other reasons. Through the groups and through the training given in associated hospitals to other graduates, the

public would be protected from the woefully inadequate attention it so often receives from the hundreds of young doctors who rush into the practice directly their diplomas are received.

The group practice of medicine would not limit individual initiative. Contrariwise, each group physician would be able to concentrate his thought and energies on the particular phases of disease most interesting to him. His contacts with increased numbers of patients would ripen his judgments and suggest new procedures in diagnosis and treatment. The competitive spirit for achievement would be stimulated. The competition would not be among the numbers of each group, but would be active against like members of other groups. Nowadays large numbers of physicians are not alive to what other fellows are doing in other cities. They feel unable to leave their practices for purposes of study for fear other physicians will secure their patients during their absence. In the group plan travel to other clinics will be an integral feature, obligatory on all members, who will suffer no financial inconveniences while away—the care of their patients will be in the hands of associates and assistants. Knowledge of the other fellow's accomplishments would breed the

desire to go him one better.

And this leads the way to a development in group medicine of a field of unlimited possibilities, that of research. Only a relatively few physicians at present are engaged in research medicine, their endeavors more or less isolated and uncorrelated in universities and research foundations. But who can doubt that in the ranks of the profession at large are born hundreds of ideas for medical progress which suffer oblivion because the doctors lack time to pursue their thought, are unprovided with laboratory facilities to test out the details of their theories, and have not a sufficient number of patients suffering from one type of disease to determine the merits of some new therapeutic procedure. Group practice will provide time, laboratory equipment, an adequate number of patients and assistants to work out original ideas and thus bring more victories over disease.

And so in society's reconstruction the possibilities in group medicine should not be overlooked. If the proper organizing forces can be found to sweep the doctors out of the present channels of practice into the one of co-operative effort, unquestionably an enriched service will flow to those who are the unfortunate victims of disease.

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# SOUTHERN CALIFORNIA MEDICAL SOCIETY SIXTY-FOURTH REGULAR SEMI-ANNUAL MEETING

Santa Ana, California

Friday and Saturday, April 1st and 2nd, 1921

Scientific Program at Elk Hall

FRIDAY—2 P. M.

Call to Order.

Reading of Minutes.

Report of Committees.

## SCIENTIFIC PROGRAM

“The Nature and Management of Hyperthyroidism.”

Dr. A. B. Cooke, Los Angeles.

“Radiation in the Treatment of Hyperthyroidism.”

Dr. Albert Soiland, Los Angeles.

Discussion opened by Dr. C. G. Toland, Los Angeles; Dr. Nelson W. Janney, Los Angeles.

“Where I have Found the Duodenal Tube of Value.”

Dr. Robert Pollock, San Diego.

Discussion opened by Dr. E. C. Fishbaugh, Los Angeles.

“Inflammation of the Bowels.”

Dr. O. L. Bloomas.

Discussion opened by Dr. H. G. Brainerd.

FRIDAY—8 P. M.

Illustrated Address.

“Causes of Certain Climatic Conditions Affecting the Healthfulness of Southern California.”

By Ford A. Carpenter, LL.D., Cor. Mem. Am. Clinical and Climatological Assn.; Mgr. Dept. Meteorology and Aeronautics, Los Angeles Chamber of Commerce.

Illustrated by 50 lantern slides from photographs and diagrams by the author.

The object of the paper is to popularly consider some of the important factors making the climate of California south of the Tehachapi mountains. The relation of the following elements to health will be discussed: Sunshine; Temperature; Humidity; Rain; Wind.

“The Status of the Present Plague In-

fection in California.”

W. T. Harrison, Asst. Surgeon, U. S. Public Health Service, San Francisco.

SATURDAY—9 A. M.

“Organotherapy in Gastroenterology.”

Dr. Samuel Florsheim, Los Angeles.

“Some Practical Points in the Treatment of Diphtheria.”

Dr. P. V. K. Johnson, Los Angeles.

“The Organization of County Health Work.”

Dr. J. L. Pomeroy, Los Angeles.

“The Relation of Socialized Medicine to the General Practitioner.”

Dr. Robert Legge, University of California, Berkeley.

SATURDAY—2 P. M.

Report of Committees.

“The Early Diagnosis and Treatment of Cancer of the Cervix.”

Dr. Roland D. Skeel, Los Angeles.

“Some Frequently Overlooked Surgical Conditions of the Posterior Urethra.”

Dr. Granville MacGowan, Los Angeles.

“Angina Pectoris: An Expression of Myocardial Exhaustion.”

Dr. Egerton Crispin, Los Angeles.

Discussion opened by Dr. Dudley Fulton; Dr. Bernard Smith.

“Surgical Treatment of the Dura Mater.”

Dr. Cecil Reynolds, Los Angeles.

Discussion opened by Dr. C. P. Thomas, Los Angeles.

SATURDAY—8 P. M.

“Interpretation of Some of the More Important Reflexes.”

Dr. Samuel D. Ingham, Los Angeles.

“Psycho-Pathology and Psycho Analysis.” (With special reference to some fallacious teachings.)

Dr. Boris Sidis, Medico-Director Psychologic Institute at Portsmouth.

# SOUTHERN CALIFORNIA PRACTITIONER

A MEDICAL, CLIMATOLOGICAL AND SOCIOLOGICAL MONTHLY MAGAZINE

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Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton,

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## EDITORIAL

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### State Society at San Diego

The Southland is honored by the meeting of the State Society at San Diego this year. The meeting will be held at the Coronado Hotel, May 10, 11 and 12. If you have not made reservations, you should do so at once. Most of our readers will probably go by auto. Those who travel by train will note that the Southern Pacific is granting a fare of one and a third on the certificate plan,

where the single fare is a dollar or more.

Coronado is quite an ideal meeting place, and no doubt there will be a large meeting. It is unfortunate more time cannot be given to discussions, for often we would like to listen more than the meager three minutes allotted. Discussion is the life of scientific medical meetings, and you may be surprised how much you can crowd into three minutes. Try it.



## EDITORIAL NOTES

Dr. Irwin C. Sutton has located in the Baker-Detweiler Building, West Sixth street opposite Pershing Square.

Dr. Wm. B. Wright, Jr., has offices at 756 South Broadway, Los Angeles.

The Journal of the A. M. A. says:

"On February 1, the Presidente Wilson arrived at the port of New York, fifteen days out from Trieste, with three cases in the sick bay which the quarantine officer diagnosed as bronchopneumonia, but which, later on, were proved to be typhus. The physician was experienced in the detection of typhus, but the cases presented no eruption, and the mistake was therefore by no means inexcusable. The patients were sent to the hospital for immigrants and the correct diagnosis later became apparent. Fortunately the error was discovered before the other passengers in the steerage had been released, and the vessel and immigrants were remanded to quarantine, where appropriate measures were applied to prevent the spread of the infection. On February 10, an Italian liner arrived with twenty well-developed cases of the disease, and with the report that three passengers had died of typhus while en route. At that time a total of thirty-four cases had arrived from Italy.

Dr. James Thornton has taken offices in the Tajo Building, First and Broadway, Los Angeles.

Dr. M. McLean Morrison announces that he will continue the practice of Dr. Henry O. Eversole during the latter's absence in Europe as a representative of the Red Cross in Child Welfare Work.

The San Diego Tribune of February 13 says:

Dr. James Fulton Percy, famous surgeon and international expert on can-

cer, was granted a divorce from Josephine L. Percy late yesterday afternoon at the conclusion of a contested divorce action that has been dragging along in department No. 4 ever since the first of the month. Judge C. N. Andrews ordered issuance of interlocutory decree on grounds of extreme mental cruelty and desertion, the testimony showing that the wife's nagging conduct in the old home in Galesburg, Ill., had forced the brilliant husband to leave his home in order to carry on his life work.

Testimony further showed that, although the surgeon's net income was about \$20,000 a year, the wife's extravagance had continually kept Dr. Percy in debt.

Attorneys Gordon Gray, T. B. Cosgrove and Dwight Bell represented the plaintiff husband, while Attorney Lucien Gray, Los Angeles, was counsel for the wife. The wife was allowed \$1,000 court costs.

The London letter of a recent issue of the Journal A. M. A. gives the following encouraging statement:

Provisional figures of the registrar-general for 1920, which have just been issued by the ministry of health, are most encouraging. The birth rate for 1920 is the highest of the decade, the death rate is the lowest ever recorded, and the infant mortality is also the lowest recorded. Moreover, the number of births is the highest ever recorded and the number of deaths the lowest since 1862, when the population was only twenty millions.

The calamities of authors—William Collins, the poet, was born in Chichester, England, 1721; was in Queen's College, Oxford, 1740-1745; suffered from melancholia, which developed into insanity, for which he was sent to a madhouse in 1754. He died in 1759, when thirty-eight years old.

# SOUTHERN CALIFORNIA PRACTITIONER

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No. 4

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## THE PRESENT STATUS OF PLAGUE INFECTION IN CALIFORNIA\*

W. T. HARRISON, ASST. SURGEON, U. S. P. H. S.

It has become quite evident during the past few years that plague has entered upon one of its periodic recurrences. While it has been present for centuries in certain portions of Asia and Africa, and, more recently in certain east and west coast districts of South America and Western United States, the past two years has seen it appear in many different parts of Europe, the west coast of Mexico and Southern United States where it is still present in rats. The Public Health Reports for February 25, 1921, record the reappearance of the disease in Porto Rico, in both man and rats, in Shanghai, China, in rats and its appearance in the Orange Free State, Union of South Africa, in man.

With the disease so widespread in the world it is of interest to consider the operation of maritime quarantine to prevent its introduction into the United States. There are three principal ports on the California coast to which vessels may come from plague infected

ports, viz., San Diego, Los Angeles (San Pedro) and San Francisco. Asiatic and west coast ports of South America present the greatest danger to western United States on account of the large commerce with these countries.

The Public Health Service maintains national quarantine stations at these 3 ports for the inspection and disinfection of vessels, and inspection stations at all lesser ports of the State. Vessels leaving a foreign port for the United States are required to obtain from the American Consul a bill of health in which is clearly set forth over the signature of the Consul the sanitary condition of the port and the precautions taken by the vessel while there. These precautions will necessarily vary with sanitary conditions prevailing at the time. During the voyage a clinical record is kept of all illnesses occurring on board and submitted to the quarantine officer on arrival at a port in the United States. All vessels arriving from plague infected ports are required to be fumi-

\*Read before the Southern California Medical Society, Santa Ana, April 1, 1921.

gated at each voyage. If the sanitary history of the vessel during the voyage presents nothing suspicious of the presence of the plague, the personnel is inspected and she is allowed to enter. While lying alongside the wharf rat guards must be worn on all lines leading to the shore, the vessel must breast off six feet from the dock, and all gangways must be raised at night, or lighted and watched. After the discharge of cargo the ship is fumigated throughout with Hydrocyanic acid gas for the destruction of rats. This gas has been adopted for routine use after rigid experimental investigations and can be said to be the most effective fumigant known, and safe to use in the hands of a trained personnel.

If, however, the quarantine officer has reason to suspect that there is a possibility of the vessel being plague infected, either from sickness among the personnel or mortality among the rats on board, the ship is refused admission until the following precautions are carried out. The personnel may be removed and detained for the period of incubation of the disease, and the ship fumigated in the stream (i. e. before going alongside the dock), then allowed to discharge either in lighters or at the wharf in the discretion of the quarantine officer. The cargo is inspected to insure that no rats which may have escaped the fumigation are discharged in the cargo. After the vessel is discharged she is again fumigated throughout to insure the destruction of all rats on board. It will thus be seen that there is little opportunity under the present rigid enforcement of the quarantine laws for the introduction of the disease from without. The proper enforcement of maritime quarantine restrictions is probably the greatest single factor in the prevention of disse-

mination of plague infection throughout the world.

### Infection in California Cities

The early history of plague in California is so well known to the medical profession of the State that it is probably unnecessary to recite any but the most outstanding facts in connection with its first appearance. The disease was first reported in San Francisco in 1900, the first case occurring in the Chinese quarter. For several years following the first outbreak few cases were reported until the period immediately following the fire, when a sharp recrudescence of the epidemic became apparent. During 1907 and 1908 a total of 159 human cases with 77 deaths were confirmed, the last case recorded on January 30, 1908. During this period 398 infected rats were collected, the last rat case being recorded on October 23, 1908. From this date to the present no plague infected rodents have been found in the city, with the single exception of one ground squirrel, shot in the Glen Park district in 1917, which was proven to be infected with plague in the chronic form.

The outbreak in Oakland in 1907 and 1908 was not so severe as that observed in San Francisco, a total of 12 human cases with 7 deaths being recorded, with 127 infected rats. Since December 1, 1908 no plague infected rats have been found in the city but in 1919 and 1920 several infected squirrels were shot in the hills east of the city, within the corporate limits. Following the disappearance of plague in man in the east bay cities in 1908 trapping operations were continued until April, 1914, since which date no operations have been carried on with the exception of a short period of trapping following the explosive outbreak of August and September 1919.

This outbreak holds considerable interest in that it represents the only

epidemic of pneumonic plague reported from the western hemisphere. The first case was unquestionably infected from a plague squirrel which was probably shot for food, the symptoms first indicating the bubonic type, pneumonia developing after incision of the bubo. After the development of pneumonia the infection was transmitted by direct contact to 12 additional cases, all of which terminated fatally. The abrupt subsidence of the infection was, no doubt, due to the hospitalization and isolation of cases together with the climatic conditions prevailing in August and September, which it is well known are not conducive to the spread of respiratory infections.

At this time approximately 6,000 rats were trapped, none showing evidence of plague infection. It has not been possible to induce these cities to take the necessary measures to build out the rat, or provide for the continuous employment of a force of trappers in order that a check might be kept on the possibility of a recrudescence of the disease. In view of the close proximity of plague infected ground squirrels to the thickly inhabited east bay region, it is exceedingly unfortunate that more interest in the situation cannot be secured.

The situation on the San Francisco side of the bay is entirely different. During the epidemic of 1908 model ordinances were adopted by the city government providing for the construction of ratproof buildings and the remodeling of all old buildings wherein food stuffs are handled, prepared or sold, and any other buildings which show signs of rat infestation. All old buildings which by appropriate measures be made to comply with the building and sanitary laws of the city are condemned and ordered demolished by the City Board of Health. The securing and maintaining in good condition of a sanitary metal garbage receptacle by each householder

is also required. It should be added that these ordinances are rigidly enforced.

After a lapse of three years trapping operations were recommended on a small scale in July 1920. Approximately 8,000 rats have been trapped and examined to date, none showing lesions even suspicious of plague. It is interesting to compare the rat catch per one hundred traps per day during 1920-21 with that of former years before such extensive rat proofing had been installed. The same methods employed under the supervision of the same employee of the Service yields a catch of considerably less than fifty per cent that of former years. No explanation of this decrease in the rat population is available other than the proper control of rat food (garbage) and the extensive installation of ratproofing in the buildings of the city.

The importance of proper care in garbage disposal was plainly demonstrated on one occasion during the present year. The situation was so well controlled as to possess all of the value of a laboratory experiment. Upon complaint of rat infestation in certain premises in the city, a four-story frame structure, occupied as stores and apartments, a trapper was instructed to place the usual number of snap and cage traps in this location. In 25 days a total of 15 rats were trapped. On the 26th day a defective garbage container was removed and replaced with one complying with the city ordinance. During the five days immediately following the installation of proper garbage disposal a total of 108 rats were trapped. This experience shows conclusively that the extent of rat infestation is directly dependent upon the available food supply, and, that even in the presence of a model ordinance covering the question of garbage disposal, an adequate corps



of sanitary inspectors is necessary for its proper enforcement.

### Squirrel Plague

Several cases of human plague reported from rural districts of Contra Costa County in 1908, investigation of which failed to trace the infection to a rat focus, directed the attention of the Public Health Service to the California ground squirrel (*Citellus beecheyi*) as a possible source of infection. Specimens were collected first from the region in the vicinity of Bay Point and submitted to the laboratory for examination, thus disclosing for the first time that plague was present in these animals. It is not possible to determine the exact circumstances under which the disease first appeared here, but the evidence strongly points to the possibility of an infected rat having escaped from a ship alongside a wharf in the upper bay, possibly in the vicinity of Port Costa.

For several years previous to the discovery of plague in the squirrels of the county, grain ships had loaded cargo at these wharves, after having discharged the inbound cargo at San Francisco or Oakland. Many of these vessels had made regular passage from plague infected ports. It is to be remembered that these events transpired before the method of the spread of plague had been worked out. Measures were immediately instituted to determine the extent of territory to which the infection had spread, and a study of various methods of squirrel extermination were undertaken. To secure specimens for laboratory examination it is necessary to employ hunters who are instructed to carefully shoot over the territory to be investigated, shipping the specimens to the laboratory in sealed metal containers. In inaccessible mountain districts, because of the difficulties of transportation, a temporary field laboratory is installed and dissections made upon the spot, all suspicious material being

referred to the central laboratory for confirmation by means of animal inoculations and cultures. When a plague infected squirrel is notified from a given district, intensive eradication measures are begun. During the dry season best results are obtained by the use of clean barley to each grain of which a coating containing strychnine has been applied. Barley has been adopted for routine use since on account of the husk it is not readily taken by birds. During the rainy season carbon bisulphide applied either by the waste ball method or by use of pumps gives the most satisfactory results.

The Public Health Service in cooperation with the California State Board of Health has operated continuously in this field since the first plague squirrels were found. The infection has been definitely outlined and comprises approximately 17,000 square miles of territory. Its northern boundary is formed by a line forming the northern boundary of Contra Costa County, and extending eastward through San Joaquin County to the foothills of the Sierras, thence southward to the southern border of Merced County, thence west and south including all of San Benito and Monterey Counties to the coast. The western border is formed by the coast line northward to the San Francisco County border.

Throughout this territory the infection is not found to be uniformly heavy, in fact some districts have not yielded infected squirrels in several years. Roughly it can be said that the areas of heaviest infection are found in the ridges comprising the coast range. Since density of population among these rodents necessarily provides for close contact it is quite readily seen that heavy infestation and infection will usually be found together, granted that infection has once appeared. The hilly sections of the State will, as a whole, be



found to be more heavily infested than the more productive valleys, since the more fertile lands are usually held in comparatively small plots and are more intensively cultivated. It is obvious that the owner can very much less afford to support a numerous squirrel population on a small orchard property, than on a stock ranch of several thousand acres. The division of large holdings among many small owners, invariably results in a solution of the squirrel problem.

Additional agencies have become interested in squirrel destruction from an entirely different viewpoint but the results of their efforts are no less effective when considered in the light of plague suppression. At present in addition to the national and state agencies above-mentioned, very active measures are being carried out by the California State Department of Agriculture, the United States Biological Survey and the various County Horticultural Departments. All of these agencies are working in the closest cooperation to the end that there is no overlapping of function or conflicting authority. These lay agencies operate solely from an economic viewpoint but their work is none the less valuable and they are engaged throughout the state in territory which is now plague free, but to which infection might readily extend if the susceptible animal is allowed to remain. This condition applies to the entire southern end of the state, as well as to that portion north of the bay region. For this reason these operations should receive the whole-hearted support of the medical profession of the entire state, and the facts of the situation impressed upon the various state and county officials who have jurisdiction over appropriations allowed for this purpose.

The danger of infection of human beings directly by fleas from infected

squirrels is probably quite negligible because of the comparative remoteness of squirrel burrows from the habitation of man, whereas the rat makes his home in the walls of houses, and even at times within the house, it is rare to find squirrel burrows within a distance of one to two hundred yards. The comparatively small number of human cases (17 in all) originating from squirrel infection during the past 12 years is sufficient evidence of the slight danger of transmission of the disease directly from squirrel to man.

Acute plague in squirrels is only present during the spring and early summer months, the late summer and early autumn yielding animals with lesions becoming increasingly chronic as the season progresses. In November and December it is unusual to find a specimen in which the disease can be proved by animal inoculations. It is thus apparent that squirrel fleas are much more dangerous during the spring and early summer, or the period when the bacillus of plague may be found in the blood stream of the squirrel. When a human case occurs late in the Calendar year, a history is usually obtained of the patients having skinned the animal without protecting the hands from infection, and the buboes are usually located in the axilla.

No satisfactory explanation for these cycles of squirrel plague has been worked out. While the young squirrels which come out in the spring and summer no doubt offer much more susceptible material than the adult animal, the fact that squirrel plague is chronic in November and acute in April has not yet been explained since the first young squirrel must acquire the infection from an acute case.

The very grave danger to thickly populated communities is the real possibility of transmission of the infection from the squirrel back to the ever

present rat population. That this is entirely possible cannot be questioned, since both animals have been trapped from the same burrow and both rat and squirrel fleas have been obtained from each animal. For this reason every urban community situated within the territory above outlined is confronted with a very grave possibility, the gravity of which depends upon the proximity of plague infected squirrels to the city limits and the size of the rat population.

The point of greatest danger at present is, without doubt, to be found in the territory immediately adjacent to the east bay cities. The range of hills immediately east of this thickly populated region has been proven to be plague infected throughout practically its entire length. The explosive outbreak of pneumonic plague in 1919, mentioned above, was without doubt due to infection of the first case from a squirrel shot in the Berkeley hills. This same range of hills yielded an additional human case in April, 1920, on this occasion a few miles below Hayward. Since these cities have not adopted the approved measures which have been enforced in San Francisco for many years, at least a force of trappers should be continuously employed in order that a check might be kept from day to day against the possible reappearance of the disease in the rats. In view of the serious commercial disturbances attendant upon the outbreak of plague in a seaport, the small expense necessary to carry on trapping operations continuously, should be considered only in the light of cheap insurance.

As matters now stand our first warning of the presence of rat plague in this district would probably be the occurrence of a human case at which time the infection among the rats would have become well established. It is for this reason that most world ports which are exposed to infection maintain a corps

of trappers and scientific personnel for the immediate detection of the disease at its first appearance. The prevention of an epizootic among the rats is always much less expensive than its suppression after it has become established to the intensity necessary for the production of human cases.

### Summary

An endemic focus of plague infection is found in the California ground squirrel, principally in the Coast Range of Mountains extending from the bay region southward, approximately 200 miles. As long as this focus remains it is to be expected that an occasional case of human plague will develop therefrom. All cities in the territory which has been proven to be plague infected are confronted with a menace, the seriousness of which depends upon their individual effort to exterminate the rats within their limits.

Trapping operations now being carried on in San Francisco indicate that there is no rat plague in the city, and operations carried out in the east bay cities in 1919 showed no infection at that time. No rat specimens have been collected in the east bay region since November, 1919.

### NEUROTIC ANOREXIA.

While loss of appetite and nausea are usually symptoms of a host of diverse pathological conditions, they sometimes constitute a disease in themselves—a kind of neurosis. In these cases the physician will find Gray's Glycerine Tonic Comp. of almost specific value for restoring the impaired appetite. It is not only agreeable to take, but produces its benefits at once in such a natural way that before the patient realizes it, the normal amount of food is being taken. Its efficacy in these neurotic cases makes Gray's Glycerine Tonic Comp. exceedingly useful in relieving the severe nausea that often occurs in early pregnancy.

## THE PHYSIOLOGICAL EFFECTS OF NITROUS OXID\*

NIEL C. TREW, M. D., LOS ANGELES.

Mr. President, Members of the Society:

Our organization stands as irrevocably opposed to the lay anaesthetist, because the lay anaesthetist must work simply by rule of thumb, without proper knowledge of the physiological action of the drugs he employs. This statement, with its natural implication that we do understand the physiological action of the drugs with which we work, has been frequently made and can not be too often repeated—but I think it is well for us occasionally to review our knowledge, and it was with this object in view that I wrote this paper. If I merely thrashed out a subject which is already threadbare to the majority of you, my excuse is that it is a subject of fundamental importance.

A great many studies and experiments have been made in the last 40 years to determine the physiological action of  $N_2O$ , but unfortunately for a long time no clear distinction was recognized between anaesthesia caused by the gas and unconsciousness produced by asphyxiation; indeed for many years the two phenomena were considered identical, and to the present day confusion is apt to occur. Even in the very recent experiments of Jones & McPeck, reported in bulletin 5 of the National Anaesthetic Society, the asphyxia necessarily present from breathing pure  $N_2O$  seems to have been ignored in determining the cause of death.

Unconsciousness, by asphyxia, may be produced by breathing any gas incapable of maintaining the oxygenation of the body, such as hydrogen, nitrogen, carbon dioxide and nitrous oxide, therefore it becomes necessary to add a sufficient quantity of O to the  $N_2O$  before

we can study its physiological effects unhampered by the signs of asphyxia. When  $N_2O$  is given pure the unconsciousness is the result of its anaesthetic properties and of the attendant asphyxia with a constant increase in the latter the longer the anaesthesia is maintained.

In 1875 Dr. Elihu Thompson pointed out the similarity of effect of Nitrogen and Nitrous Oxide—referring to  $N_2O$  without an admixture of O, and in 1890 H. C. Wood carried out a series of experiments as a result of which he came to the conclusion that "The knowledge we have of the physiological action of  $N_2O$  indicates that it has no inherent anaesthetic properties, but that the loss of consciousness which follows its inhalation is the result of asphyxia—that pure nitrogen acts in the same manner, that is by shutting off the  $O_1$  and that the addition of 10% of O to the  $N_2O$  is capable of suspending the anaesthetic effects". Indeed as late as 1915 Crile stated that in  $N_2O$  and O we have two antagonistic agencies which gives us perfect control of the anaesthesia—the less O the deeper the anaesthesia—the more O the lighter the anaesthesia.

However, in 1891, Van Arsdale had reported experiments in which by the use of artificial pressure anaesthesia was produced without asphyxia and with a mixture of  $N_2O$  and 20% O, even though the pressure was raised to only  $1\frac{1}{4}$  atmospheres. Since we know that men can work for hours under a pressure of several atmospheres without being anaesthetized by the air they breathe, it becomes apparent that  $N_2O$  must differ from N in its anaesthetic properties. Both gases when given pure produce unconsciousness, but when 20% O

\*Read before the Los Angeles Anesthetic Society.

is added, one becomes wholly inactive under any pressure, while the other retains its anaesthetic powers if the pressure is but slightly raised. The weight of gas dissolved in a liquid is in direct proportion to the pressure, and when  $N_2O$  is diluted with  $O$  it is necessary to raise the pressure so as to have enough  $N_2O$  dissolved in the blood to produce its characteristic effect.

It is commonly stated that  $N_2O$  is dissolved in the blood, in the proportion of about 45 volumes of gas to 100 volumes of blood, without chemical combination, though the fact that more of the gas is dissolved in blood than in an equal quantity of water makes it probable that a certain amount of the gas must be held in chemical combination—probably with the lipoids. Its action within the body is practically confined to the cells of the higher nerve centers, in which it partially inhibits oxygenation, thus simulating the condition present during natural sleep. There are several theories as to how this is brought about, one that the  $N_2O$  interferes with the oxygen by which the cells are enabled to make use of the oxygen present, but the most probable is that in some way it interferes with the permeability of the cell membranes. Why the cells of the cerebrum should be the only ones affected is difficult to explain, but it is interesting in this connection to recall a series of experiments carried out by Crile some years ago to determine the effects on the different tissues of extreme exsanguination. He found that the higher nervous centers—those latest acquired—were the most sensitive and the first to succumb, and it has occurred to me that herein may lie the explanation of the selective action of  $N_2O$ . In all the cells of the body there may be a slight interference with normal oxygenation, but the effect of it may be apparent only in the higher nerve cells which are particularly sen-

sitive to such influence. But, whatever the explanation is, the fact remains that it is only on the higher nerve cells that the effects of the gas are manifest. In the last edition of the U. S. Dispensatory it states that " $N_2O$  is remarkable among anaesthetics in being almost physiologically inert, save in its effect on the cerebrum. While as it is ordinarily administered there are marked alterations in the circulation owing to partial asphyxia, by carefully combining pure  $O$  with the gas it is possible to induce with  $N_2O$  a state of complete anaesthesia without any considerable change either in rapidity of the pulse, blood pressure or respiration." Regarding the latter part of this quotation as to pulse, blood pressure and respiration, all of the recent authorities I have been able to consult seem to agree. Thus McKesson (Year Book 1915-16) "None of the general anaesthetics are capable of producing and maintaining increased blood pressure. It has been erroneously claimed that  $N_2O-O$  increases blood pressure—at least this is not true clinically. These gases may be administered in any operation which is comparatively free from other shock producing factors for 2 hours without a material change in either diastolic or systolic pressure, but there is a time limit beyond which the blood pressure will progressively fall even under  $N_2O$ , but differing from ether this fall is discontinued at once upon removing the anaesthetic, and is followed by a comparatively rapid rise approaching the normal pressure within a few minutes".

Castro (1917) found a tendency for a rise of blood pressure only when cyanosis appeared. Haemoglobin was reduced during  $N_2O$  anaesthesia but much less than under ether or chloroform and returned to normal in from 20 to 30 minutes after discontinuance of the gas, whereas under ether the greatest reduc-



tion in haemoglobin is at the end of 24 hours. The coagulation time of the blood was decreased more than one minute, and returned to normal in about 20 minutes. He also found that acid production of metabolism may be increased under anaesthesia when deep cyanosis is permitted to occur or continue, but when a sufficient supply of O is provided this may be prevented.

Davis and Spencer in the *Therapeutic Gazette* February 1919 report a series of experiments on blood pressure during  $N_2O$ -O anaesthesia and conclude that "in all instances where there was a marked rise of blood pressure there occurred rigidity, jactitation or lividity. These phenomena, the result of O deprivation, or asphyxia, can be easily avoided by increasing the O percentage in the mixture of gases. We found that rise of blood pressure rarely occurs if the patient's color is kept free from duskiess. In 85% of the cases there was either no change, a fall, or only a negligible rise. Rise in blood pressure is always accompanied by rigidity, jactitations of lividity.  $N_2O$  anaesthesia is not accompanied by rise of blood pressure if sufficient O is admitted to prevent rigidity, jactitations and lividity."

So I think we may accept it as a fact that any blood changes produced by  $N_2O$ -O are of minor extent as compared with other anaesthetics and that the blood pressure is not raised if enough O is given in the mixture to prevent anoxemia. There is always the possibility of increased blood pressure, for we are dealing with a mixture of gases one of which has an asphyxiating action, but asphyxia is not a necessary part of the anaesthesia, and this brings us to the question—What proportion of O may be given, and is there a danger of over-oxygenation?

According to the U. S. Dispensatory:

"Pure O is so irritant locally that it is difficult to respire it—the statements sometimes made, however, that it is impossible to live in an atmosphere of pure O do not seem to be well supported at least so far as human beings are concerned. Normally the blood leaving the lungs is fully oxygenized and the only increase in the amount of O the blood will carry is in the relatively small proportion which is dissolved in the blood plasms. While this quantity may be notably increased by inhaling O, in conditions of health its proportion to the O in the oxy-haemoglobin is so small that it does not greatly affect the oxygenation processes in the body. When the haemoglobin is deficient it may become an important factor."

Shoemaker mentions a case of double pneumonia treated with inhalations of O diluted with 10%  $N_2O$  in which there was collapse every time the inhalations were discontinued but in which the patient made a complete recovery after 106 hours of continuous inhalations.

In the case of small animals confined in an atmosphere of pure O which died after several days, it has been proved that death resulted not from the O but from the decomposition of the excretare in the bell jars.

I have been unable to find any record of injurious effects from too much O being given, though Henderson in the year Book of Anaesthesia 1916 warns against attempts at forcibly insufflating the lungs with O under pressure for purely mechanical reasons. O accomplishes two things—it supplies the needs of the body and it dilutes the  $N_2O$ . The first is a necessary thing in all operations lasting more than a few minutes, the second is undesirable in most cases and must be compensated for by increased pressure. However in a few cases, particularly in anaemic patients, its effect upon the nervous centers. In



O is the most convenient for that purpose. In Bulletin No. 8 of the Natural Research Society, McKesson reports a case in which the patient could not take more than 40% of  $N_2O$  with 60% of O without showing signs of  $N_2O$  poisoning.

We have then in  $N_2O$  when combined with the proper proportion of O an anaesthetic practically inert except in its effect upon the nerve centers. In proper doses its effects are manifest only upon the higher centers, but when given in overdose it depresses and finally paralyzes the respiratory center. Like all anaesthetics it is capable of causing death, but when given intelligently it is the safest anaesthetic we possess and the freest from injurious side effects.

#### WINTER COLDS.

There is nothing that will remove a tendency to colds (nasal catarrhs, bronchitis, laryngitis) more quickly and satisfactorily than a course of treatment with Gray's Glycerine Tonic Comp. Its effect is not only to promote reconstructive metabolism and thus enable the whole body to better withstand disease, but in addition, it imparts a local effect to the respiratory structures that unquestionably increases the local resistance to bacterial invasion. One thing is certain, cases of the ordinary respiratory diseases not infrequently prove intractable to all treatment until Gray's Glycerine Tonic Comp. is administered. Experience has proven this, and there are countless physicians who use this dependable tonic exclusively for clearing up their cases of pharyngitis, laryngitis, bronchitis and allied conditions.

#### THE APPETITE IN TUBERCULOSIS.

In view of the fact that hypernutrition, or so-called forced feeding constitutes one of the important indications

in the treatment of many cases of tuberculosis, more than ordinary attention must always be devoted to maintaining the appetite. Unfortunately, many of these patients have an aversion to the very foods which are best adapted for repairing and resisting the ravages of the disease. It is here that Gray's Glycerine Tonic Comp. serves one of its most important purposes, by reason of its notable capacity to awaken a deficient appetite in a perfectly natural manner. It not only possesses the desirable feature of great palatability but through its tonic properties, it never fails to impart just the right tone to the digestive organs. Thus the effects are so much more permanent and far-reaching than are obtained from ordinary stomachics, that not only are larger quantities of nourishment freely taken by the patient, but a correspondingly increased amount finds its way to the remote tissues.

#### AMERICAN MEDICAL EDITOR'S ASSOCIATION

The 52nd Annual meeting of the American Medical Editor's Association will be held at the Hotel Lenox, Boston, Mass., on Monday and Tuesday, June 6th and 7th, under the Presidency of Dr. H. S. Baketel, Editor of the Medical Times.

A novel feature of our literary program will be introduced this year in the shape of a symposia, which will be discussed by various members. The subjects will be,

"Group Practice and the Diagnostic Clinic"

"What should be the Attitude of the Profession Toward Health Centers?"

"The Correlation Between Editorial, Advertising and Subscription Work?"

Every doctor, even remotely interested in medical journalism, will find it to his advantage to attend, and is most cordially invited.

No 10

# SOUTHERN CALIFORNIA PRACTITIONER.

A MEDICAL, CLIMATOLOGICAL AND SOCIOLOGICAL MONTHLY MAGAZINE

This journal endeavors to mirror the progress of the profession of California and Arizona

Established in 1886 by Walter Lindley, M. D., LL. D.

DR. GEORGE E. MALSBAR Y

Editor and Publisher

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## EDITORIAL

### STATE BOARD OF HEALTH IN LOS ANGELES.

One of the busiest and most important departments in Southern California is that of the State Board of Health, located on the eighth floor of the Pacific Finance Building, corner of Sixth and Olive streets, Los Angeles.

Doctor Walter M. Dickie, Secretary and Executive Officer of the State Board of Health and Acting Director of the Bureau of Social Hygiene, divides his time between the Los Angeles office, the Sacramento office and the San Francisco offices. Dr. Gavin J. Telfer, State District Health Officer, devotes all of his time to Southern California with headquarters at this Los Angeles office. His work consists in visiting and inspecting suspicious epidemic outbreaks in schools, institutions and communities, one of his late important duties while inspecting a suburban town leading to the discovery of several cases of pol-

iomylitis. Doctor Telfer co-operates in every way possible with the county and municipal health departments. Mrs. Elizabeth McManus, Social Service Director, Bureau of Social Hygiene, devotes her time to educational work, visiting and lecturing to clubs, organizing social workers and encouraging and assisting counties and municipalities in establishing homes and schools for the education and rehabilitation of girls who are under sentence by the juvenile courts.

Miss Kate S. Douglass is Assistant Inspector of Schools of Nursing and represents the Bureau of Registration of Nurses. Doctor Agnes S. Ruddock is bacteriologist in charge of the Southern Branch Laboratory, Bureau of Communicable Diseases, and has as her laboratory assistant Miss Lucy Powers. Specimens and cultures come to them from all Southern California, amounting to several thousand each month. This

laboratory is open to all physicians in the southern part of the state. To reach it address as above or telephone Pico 3621, Station 13. Miss Linda Mitschke is the field worker for the Bureau of Tuberculosis. Milton P. Duffy and W. H. Gourley are inspectors of the Bureau of Foods and Drugs. They will consider it a favor if all members of the medical profession or other citizens, who see any questionable food or fraudulent

food or drug preparations on the market, will report the same to them. Miss Alice O'Donnell is the stenographer of the Bureau of Social Hygiene. Mrs. Grace D. Naquin is the chief clerk and should be applied to for any general information in connection with the State Board of Health's work. Members of the profession are cordially welcome by this staff at any time.

### TYPHOID FEVER IN LOS ANGELES

The Journal of A. M. A. for March 26, 1921, presents its ninth annual survey of typhoid fever mortality in the cities of the United States containing population of more than 100,000. There are now sixty eight cities with popula-

tions of more than 100,000 containing more than one-fourth of the population of the United States.

The following table is very creditable to our city and shows the results of a pure water supply:

	Deaths from Typhoid per 100,000 Population				
	1920	1919	1916-1920 Average	1911-1915 Average	1906-1910 Average
Chicago .....	1.1	1.2	2.4	8.2	15.8
Boston .....	1.5	2.2	2.5	8.0	16.0
New York .....	2.4	2.0	3.2	8.0	13.5
Los Angeles .....	2.6	4.7	3.6	10.7	19.0
St. Louis .....	2.7	5.8	6.5	12.1	14.7
Pittsburgh .....	2.7	6.2	7.7	15.9	65.0
San Francisco .....	3.1	3.3	4.6	13.6	27.3
Cleveland .....	3.2	2.4	4.0	10.0	15.7
Philadelphia .....	3.3	4.4	4.9	11.2	41.7
Baltimore .....	4.7	8.9	11.8	23.7	35.1
Detroit .....	5.1	5.3	10.6	18.1	21.1
Buffalo .....	5.1	7.0	8.1	15.4	22.8

#### DEATH RATES FROM TYPHOID IN CITIES OF GROUP 2 (FROM 300,000 TO 500,000 POPULATION)

	Deaths from Typhoid per 100,000 Population				
	1920	1911	1916-1920 Average	1911-1915 Average	1906-1910 Average
Newark, N. J. ....	1.9	2.1	3.3	6.8	14.6
Seattle .....	1.9	2.3	2.9	5.7	25.2
Milwaukee .....	2.2	3.5	6.5	13.6	27.0
Minneapolis .....	2.6	3.1	5.0	10.6	52.1
Cincinnati .....	3.0	2.6	3.4	7.8	30.1
Indianapolis .....	3.8	4.7	10.3	20.5	30.4
Washington .....	6.5	3.7	9.5	17.2	36.7
New Orleans .....	7.4	13.7	17.5	20.9	35.6
Kansas City, Mo. ....	7.6	11.2	10.6	16.2	35.6

#### DEATH RATES FROM TYPHOID IN CITIES OF GROUP 3 (FROM 200,000 TO 300,000 POPULATION)

	Deaths from Typhoid per 100,000 Population				
	1920	1911	1916-1920 Average	1911-1915 Average	1906-1910 Average
Rochester, N. Y. ....	1.0	3.8	2.9	9.6	12.8
St. Paul .....	2.1	3.0	3.1	9.2	18.3
Columbus, Ohio .....	2.5	3.0	7.1	15.8	40.0
Portland, Ore. ....	3.5	3.6	4.5	10.8	23.2
Akron, Ohio .....	3.7	8.4	..	...	...
Providence, R. I. ....	3.8	3.4	4.4	10.2	14.3
Denver .....	5.0	3.2	5.8	12.0	37.5
Oakland, Calif. ....	5.5	3.2	3.8	8.7	21.5
Louisville, Ky. ....	5.5	9.0	9.7	19.7	52.7
Jersey City .....	6.7	2.2	4.5	7.2	12.6
Toledo, Ohio .....	7.3	3.1	10.6	31.4	37.5
Atlanta, Ga. ....	12.8	9.6	14.2	31.4	58.4

Kansas City, Mo., brings up the bottom of the list, a circumstance hardly creditable to that municipality in view of the far greater improvement effected in typhoid rates during the last decade by cities less favorably situated. Why should Kansas City have an average typhoid rate for 1919-1920 nearly double that of Washington? During the summer the residents of Kansas City were warned to boil water drawn for drinking purposes from the public supply.

## EDITORIAL NOTES

Dr. Ruddock, the bacteriologist at the laboratory of the State Board of Health, Room 821 Pacific Finance Building, Los Angeles, reports the following examinations during the month of March:—

Diphtheria .....	926
Tuberculosis .....	63
Gonococcus .....	98
Widal .....	36
Faeces .....	16
Rabies .....	2
Miscellaneous .....	16

Total .....1157

Segregated by counties as follows:

Imperial .....	27
Inyo .....	1
Kern .....	6
Los Angeles .....	702
Orange .....	131
Riverside .....	53
San Bernardino .....	147
Santa Barbara .....	5
San Diego .....	4
Ventura .....	81

Total .....1157

The Imperial County Medical have elected the following officers to serve for the next year: President, Dr. W. W. Apple; Vice President, Dr. E. Harley, of Seeley; Secretary Dr. H. W. Owen; delegate to the state convention, Dr. L. C. House; alternate, Dr. R. O. Thompson of Imperial.

The death of Dr. Stanley P. Black, age 62 years, at his home in Pasadena March 5th, removed from us one of the most true-hearted, loyal, able men that Southern California has ever known.

Dr. Wilfred T. Grenfell of Labrador fame spent several weeks recently in Los Angeles. Dr. and Mrs. Grenfell were the house guests of Dr. and Mrs. Milbank Johnson.

Dr. W. E. Carter, of San Bernardino, with his wife and children have gone to Paris, where they expect to remain for the coming two or three years, the doctor going for the purpose of making a special study of nutrition problems among the peoples of Central Europe.

Dr. Carter goes to Europe both for personal study and to represent the University of California in a study of nutrition problems among the unfed peoples of Central Europe. The lack of proper foods among these peoples is not only causing thousands of deaths every day, but it is also developing new medical problems that are being watched closely by medical experts all over the world. It is this problem especially that Dr. Carter goes to Europe to study.

Dr. Carter will establish his family in or near Paris and with that as a base of operation he will make trips into Austria, Hungary, Czecho-Slovakia, Poland and other countries in that part of Europe.

Dr. C. W. Anderson who is taking a post-graduate course at Johns Hopkins University will, in September, locate in Los Angeles for the practice of surgery.

Dr. B. E. Merrill has opened a much needed hospital in Santa Paula.

Dr. Roy W. Hammaek will hereafter be in charge of the Pathological and Chemical Departments of the Brant and Zeiler Laboratories. Dr. Robert Smart has been elected Health Officer of San Diego.

Dr. H. E. Morrisson, formerly of the Seymour Sanatorium of Banning, has been appointed by the Los Angeles Board of Supervisors as specialist in charge of the Olive View Sanatorium for the Tuberculosis.



Dr. John F. McDonald, who has been visiting in Los Angeles for some time, recently received word of his appointment as surgeon of the United States vocational school camp which has just been established at El Centro for the benefit of former service men who are suffering from tuberculosis and who want to learn farming and locate in Imperial Valley under the land purchasing scheme worked out by the Federal Board for Vocational Education. Dr. McDonald, who formerly resided in Kentucky, has been in the army for the last four years and only ten weeks ago obtained his discharge from the post at Fort Yuma, Ariz.

Dr. E. H. Garrett, age 48 years, graduate of the Medical Department of the University of Southern California, died in his home in Los Angeles on February 18.

Dr. Lulu Peters, who distinguished herself in Red Cross work in the Balkins has returned and taken offices in the Haas Building corner of Seventh and Broadway.

Dr. J. M. Hancock, recently of Chicago, has taken offices in the Consolidated Realty Building in Los Angeles.

Dr. Eugene A. Hensel, 2908 Myrtle Avenue, who had resided and practiced in San Diego, for the last 10 years, died March 17, after toiling almost up to the time of his death to relieve suffering in others while he himself was the victim of a strange malady which gave him great pain, and which brother physicians had sought in vain to define and cure. As late as the afternoon of his death Dr. Hensel made several visits on patients, although he was hardly able to walk.

Dr. Hensel was a graduate of Rush medical college of Chicago and had been

a practicing physician since 1905. He was on the medical staff of St. Joseph's hospital and for several years was physician for the Santa Fe railroad. He was a vestryman of St. Paul's Episcopal church, a member of the University club, a Mason, an Elk and an Odd Fellow. He is survived by his wife.

The whirligig of politics has deposed Dr. C. S. Stadfield from his position as Police Surgeon of Los Angeles. Dr. E. G. Goodrich was elected by the City Council to succeed Dr. Stadfield.

Dr. Harlan Shoemaker, of Los Angeles, addressed the Riverside County Medical Society at a largely attended meeting on March fourteenth. Dr. Shoemaker's subject was: "Absorbition and Elimination of Waste with relation to Abdominal Surgery".

Dr. Willella Waffle, who has been a practicing physician in Santa Ana for forty years was recently given a hearty reception by her friends and neighbors at the Episcopal church of the Messiah. There was such a profusion of flowers that the doctor said she almost felt that she was attending her own funeral.

Drs. Raymond Mixsell, C. D. Lockwood, Frederick Spike and Paul A. Ferrier have purchased a valuable business lot in Pasadena upon which they will erect a six story office building.

Dr. W. Burr Smith and Miss Camille Grimaud were married at the bride's residence 4314 South Western Avenue, Los Angeles on March 11th.

Dr. Smith has been resident physician of the Golden State Hospital since he left military service. He is a member of the Phi Chi, Phi Sigma Gamma and Alpha Cappa Cappa fraternities. They will make their home at 4314 Western avenue for a time.



Dr. Reginald E. Petter, has taken offices in the Consolidated Realty Building, Los Angeles.

Dr. R. W. Wilcox of Long Beach and Mrs. Elsie Feldman of San Francisco were married in the bay city on March 1st.

Dr. Wilcox is a San Francisco man, who came to Long Beach two years ago after being released from army service. He is surgeon for the Long Beach and Southwestern shipyards. Dr. Wilcox will bring his bride to this city the latter part of March. The new home will be at 1242 Cedar avenue.

Dr. A. J. Ochsner, of Chicago, was one of the chief speakers at the Arizona State Medical Convention held in Tucson April 15 and 16.

Dr. S. J. Brimhall has located in Elsinore and will devote himself especially to supervising patients taking treatment at the Elsinore Hot Springs. The doctor graduated from the University of Minnesota in 1902.

Dr. W. P. Ferguson, age 79 years, who had been practicing in Santa Ana for 30 years. Though advanced in years, the doctor stuck to his favorite vehicle of travel—a bicycle. Riding his bicycle with his little black medicine case held at the handle bars, he was a familiar figure on the streets.

It is a joy to see Dr. Norman Bridge, the picture of health, again in his usual haunts. Dr. Bridge, although 76 years young recently underwent an appendectomy returning home from the hospital one week after the operation.

Dr. Frank Ball, age 34 years, who died at his home in San Diego on January 30, was a graduate of the Medical Department of the University of South-a. He had practiced in San

Diego for 8 years and is survived by his widow and a son and daughter.

Dr. Alfred Gumbiner has located in Los Angeles with offices in the Merchants National Bank Building.

Announcement of the appointment of George Hoyt Whipple; director of the Hoover foundation at the University of California, as dean of the school of medicine, dentistry and surgery of the University of Rochester was recently made.

The school is being established on a foundation of \$9,000,000 given by George Eastman and the General Education Board.

The great success of the sixty-fourth semi-annual convention of the Southern California Medical Society justified the wisdom of those who founded it in the Hollenbeck Hotel 32 years ago. It was a source of regret that Dr. W. G. Cochran, its first secretary was not present. There were over 500 present and the scientific papers were of a high standard.

Dr. Walter M. Dickie, secretary State Board of Health says:

“Sacramento City and county officials are active in rabies control work. Ten or twelve stray dogs are caught daily in Sacramento and not more than two out of every ten are redeemed at the city pound. Dr. W. J. Hanna, City Health Officer threatens to organize a shot gun squad and exterminate every stray dog. The board of supervisors is considering the passage of a licensing and muzzling ordinance. These activities are prompted by the recent appearance of a number of cases of rabies in animals. Sacramento officials believe in the prompt application of preventive measures in order that rabies may be quickly checked.

Four human beings in California died

of rabies last year. The records show that 152 persons received the Pasteur treatment,—the only known preventive. There have been several human deaths from rabies already this year and reports of cases in animals continue to come in. San Joaquin, Fresno, and Sacramento County authorities are active in the enforcement of control measures against the disease. Every health officer in the state should watch local conditions closely in order that this disease may not gain a hold in the community."

Complete data on leprosy in California has been compiled by the State Board of Health and arrangements will be made soon for the transfer of these 42 lepers to the National Leprosarium at Carrville, Louisiana. Following is a list of the number of lepers now cared for in the various counties of California.

Alameda County.....	7 cases.
Los Angeles County.....	7 cases.
San Francisco.....	21 cases.
Santa Clara County.....	2 cases.
Stanislaus County.....	1 case.
Ventura County.....	2 cases.
Contra Costa County.....	2 cases.

### DO MOVIES HURT THE EYES?\*

The fact that millions of people go to motion picture shows throughout the United States daily without experiencing any discomfort to their eyes, or that such eye trouble that is found is not traceable to "over indulgence" in the movies, would seem to indicate that motion pictures are not injurious to the vision.

It is true, of course, that some people do experience a certain amount of eye strain at a motion picture, but in these cases the trouble appears to be due to an ocular defect rather than to the motion picture. Such persons should therefore have the eyes examined by a competent eye specialist, for it is quite certain that the same person would find

even more discomfort in the same period of concentrated reading.

In this connection it may be pointed out that employes of motion picture playhouses, who spend a large part of the day looking at the pictures, do not seem to be troubled with their eyes any more than the average individual. This, is largely a personal observation since no extensive investigations have been made of the eyes of motion picture theatre employes.

It is safe to say a person may witness a picture play lasting about an hour and a half each day without straining the eyes or experiencing any discomfort, provided the eyes are good and there are no hidden defects to the vision. Indeed it is not unlikely that a motion picture show might be the means of advising one of a faulty vision.

In case of eye trouble coming on after concentrating the eyes on the printed pages of a book for a long period one does not blame the book, but thinks at once of the eyes and the probable need of glasses.

Eye discomfort in the movies should therefore be regarded as a danger signal and should lead the sufferer to the doctors office for an examination.

\*United States Public Health Service.

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W. G. COCHRAN, M.D.

1921

Organizer and First Secretary Southern California Medical Society; Vice-President  
California State Medical Society

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Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. C. G. Stivers,  
Dr. Olga McNeile, Dr. W. H. Dudley, Dr. J. M. Mathews

## MODERN X-RAY TREATMENT

By GEORGE E. MALSBAR Y, M. D.,

Roentgenologist, The California Lutheran Hospital (Formerly The California Hospital),  
Los Angeles.

Speaking before the New York Physicians' Association last November, Sittenfeld described as the "New Roentgenotherapy in Cancer," the technic he had observed during an extended visit to Germany last summer. Our own Coolidge visited Germany last August, and investigated the X-ray work in the German centers. As is characteristic of us, we have now improved upon the work of the Germans and made more practicable the accomplishment of the wonderful results they have secured during the past two years. Regarding the work of the Germans, we may give the following summary from Sittenfeld:

"On my visit to Germany last summer, I had occasion to learn of the marked advances in roentgenotherapy during the last year and a half. The technic has undergone great changes; in particular, accurate measurements have been established, thus making possible exact dosage in carcinoma, sarcoma and

benign tumors. These improvements are obviously due to the construction of more powerful roentgen-ray apparatus, and with it new tubes to accept a high tension voltage. It is hardly worth while to dwell at length on the former shortcomings except for comparisons: With the older machines it was impossible to obtain sufficient radiation to penetrate farther than from 3 to 5 cm. to an appreciable extent, while the new type of inductor or transformer develops hard rays capable of penetrating the entire body. Formerly, the greatest intensity obtainable from the older type apparatus and that in use here ranged from 80,000 to 140,000 volts, whereas the modern roentgen machine operates with an intensity of from 180,000 to 220,000 volts. It should be borne in mind that 3 mm. of lead was sufficient to absorb all the rays from the former roentgen-ray apparatus, compared with 25 mm. of lead necessary to

\*There is no such difference as these figures indicate. The Germans measure by the peak voltage, whereas we use the root mean square voltage figures, which must be multiplied by 1.4 to give the peak voltage figures. Furthermore, we estimate the spark-gap between points, which is about ten per cent less than when the spark is between a point and plate. The new Coolidge tube runs at 280,000 volts, estimated as peak volts.



absorb the hard rays of the modern type.\*

### Effective Radiation

"The need of more powerful roentgen-ray intensity made it apparent that the construction of tubes tolerating this high tension voltage offered the most difficult problem. As a result of the most painstaking labor by the ablest physicists, three standard types of tubes are now in use. They are the Lilienfeld tube, a vacuum tube used with the Radio-Silex machine, the Müller Siederöhre, a gas tube with hot water circulation and a self regulating device for hardening, and lastly the Furstenau-Coolidge tube, a larger and much improved Coolidge tube. All three give equally good results. These tubes are capable of operating with a 16 to 18 inch spark gap, compared to the 9 or 10 inch spark gap of the older type, and running constantly from eight to ten hours a day. The quality of rays is necessarily better and the quantity greater, containing larger amounts of hard rays and consequently greater penetration.

"The improvements of apparatus and tube in turn led to the study of accurate measurements of dosage and ray absorption in the deeper tissues. It was found, for instance, that the bundle of rays emitted from a roentgen-ray target at a certain point of filtration effects an even and homogeneous radiation, and cannot be altered qualitatively by further filtration. This point is called the homogeneous point. In other words, rays filtered from this point on possess the same quality of hardness no matter how much more filter is used, and these are the rays now used in the technic of modern roentgenotherapy.

### Dosage

"It is possible with a 220,000 volt energy from the new apparatus to obtain 30 per cent. of homogeneous ray at a depth of 10 cm.; and if to this is added the scattered and secondary ray,

it amounts to nearly 40 per cent. of the skin erythema dose. This amount of penetration has enabled a cancer of the uterus, for instance, situated from 7 to 10 cm. under the surface, to receive 40 per cent. of a lethal dose directed from the abdomen. Another 40 per cent. can be administered from the back, if necessary, from 10 to 15 per cent. from each side, making a total of 100 to 110 per cent. of a skin erythema dose. Biologically and experimentally, it has been established that from 85 to 90 per cent. of a skin erythema dose will destroy cancer tissue, so that it is easily possible to administer a sufficient and effective amount with this technic. If, however, the full cancer dose has not reached the center of the tumor mass, then the desired dose can be realized by placing a small amount of radium in the uterus.

"After all, the important feature to keep in mind is that it is absolutely necessary that every part of a cancer of the uterus, for instance, receives a full and lethal cancer dose to bring about the desired result. On the other hand, if any part of the tumor has not received the full dose, a recurrence is sure to follow. If the total amount absorbed by the tumor is 40 per cent. of a skin erythema dose or less, it will stimulate the tumor growth instead of destroying it. The lack of accurate measurements and the inability to obtain a sufficient amount of hard and penetrating ray in the affected parts has been responsible for previous failures.

"It will be evident to every one that an exact clinical knowledge of the location of the tumor is requisite, in order to calculate the correct dosage: the size of the tumor, the depth of the tumor beneath the skin, and also the involvement of the parametrium, etc., must be determined. All parts of the tumor must receive the same homogeneous radiation, and preferably in one treat-

ment. There is a definite reason for this, as one dose properly administered is more effective than smaller doses given repeatedly. With a small dose the radiated tissue has time to recuperate, and every repeated dose requires a larger amount of radiation, and with it more strain on the overlying skin.

“Another factor of great moment is the preservation of the connective tissue, which is so essential in the recession of a tumor. Along with this it is important to conserve the adjacent normal tissue, and not to subject the bladder, rectum and colon to irreparable damage. Fortunately, the bladder and rectum tolerate a dose a trifle higher than the skin; and since the dose for carcinoma is 85 and that for the skin 100, the correct radiation dose allows enough free play to prevent damage to the bladder and rectum. Injury to these organs and rectovesical fistula resulted formerly simply because a cross-fire radiation was directed to the tumor, and the overlying or underlying tissue received twice the dose of the tumor.

#### Methods of Treatment

“From these preliminaries it is easily conceivable that an intelligent administration of roentgenotherapy requires more than a mere knowledge of the roentgen ray; for clinical exactness and therapeutic skill as to dosage and absorption are just as essential to the radiotherapist as surgical judgment plus surgical technic is to the surgeon. It must be evident, therefore, that it is difficult to set down a hard and fast rule for the treatment of every case of cancer.

“In Bumm’s clinic in Berlin, for instance, cancer of the uterus is radiated in four fields; one large field over the abdomen, one directed from the back, and one from each side. The distance of the tube from the skin is 30 cm., and 0.8 mm. of copper is used as a filter. As a general rule the intensity of

190,000 to 200,000 volts with a 16 inch spark gap is used, and it requires ninety minutes with this high tension voltage to obtain an erythema dose. In all, four fields are radiated at ninety minutes each, 360 minutes—six hours—treatment. This dose is administered at one sitting, and after the treatment a transfusion of blood is given intravenously and the patient is put to bed for a few days’ rest, as there is considerable damage to the blood.

“At Seitz and Wintz’s clinic in Erlangen, six or seven fields are radiated, three in front, two from the back, and one into the vagina. The focal distance is 23 cm. with a 16 inch spark gap, and 0.5 mm. copper or zinc filter. With their technic, each erythema dose requires thirty-five minutes, or from three and one half to four hours in all. This procedure is repeated twice at intervals of six weeks, one treatment for each parametrium. To many therapists this seems objectionable, as too much time elapses before a complete knockout dose is given, and if the cancer is a very malignant one, the spread may be too rapid to allow this time interval. Besides, it seems an unwarranted strain to subject the skin to three times an erythema dose.

“In the gynecologic clinic of Opitz in Freiburg, the focal distance used is 50 cm., and four fields are radiated at 120 minutes each at one sitting of eight hours. The results are astoundingly favorable; for instance, in Freiburg no cancer of the uterus has been operated on since Jan. 1, 1919. In a private communication, Opitz presented me with his figures of sixty-three cases of cancer of the uterus since that date, forty-one cases of cancer of the cervix, and twenty-one of the body of the uterus. Of the forty-one cervix cases, twenty-two had receded, ten were not influenced, and nine patients died. Of his twenty-one cases of cancer of the body of the uterus, seventeen, or 80 per cent., re-

ceded, two were not influenced, and two patients died.

"Wintz reported to me that he had radiated about 3,000 cases of cancer of the uterus in the last seven years. In about 70 per cent. of the cases of cancer of the body of the uterus, the disease was arrested over a period of four years, and in the cervix cases, 45 per cent. of the patients were alive after four years. These figures are perfectly astounding, but will be better understood when it is taken into consideration that in 1919, 7,000 radiation doses were administered in this clinic, in a small town of 27,000 inhabitants. There are eight roentgen apparatus of the latest type in use there for from eight to ten hours daily.

"Carcinoma of the breast in their clinic is treated with an entirely new technic. Here, especially, has roentgen therapy undergone considerable change. Cancer of the breast does not adapt itself to the same method of radiation as that of the uterus. In one, the tumor is situated virtually in the midplane of the pelvis; half of a cancer dose can be administered from the abdomen, and an equal dose from the back, so that both sides furnish the full carcinoma dose. In the breast, however, the malignant growth is situated from 3 to 5 cm. beneath. Fortunately, this has been accomplished in the following manner: The tube is put at a distance of from 70 to 90 cm. from the skin; thus, only the hardest and most penetrating rays are used through a filter of 0.8 mm. of copper. By increasing the focal distance, the time of obtaining an erythema dose is also greatly increased (since the intensity of the ray diminishes inversely as the square of the distance). With 70 cm. distance, 320 minutes are necessary; but with 90 cm., 535 minutes, or nearly nine hours, are required. In this manner from 85 to 90 per cent. of a skin erythema dose penetrates from 3 to 5 cm. under the sur-

face of the skin, and in the majority of cases the tumor is generally not deeper. If the patient is restless, morphin or scopolamin is ordered. At the cancer institute in Berlin, four fields are used in breast cancers, one over the breast, one over the back, one in the axilla, and one over the supraclavicular region, each field for 120 minutes, or a total of eight hours. I have seen report for observation there in one day thirty-five patients with cancer of the breast which had been radiated two, three or four years previously, nearly all of them with gratifying results. Whenever there is axillary glandular involvement they prefer roentgeno-therapy rather than the knife.

"This brings me to another interesting phase of radiation, bearing especially on cancer of the breast. Throughout virtually all Europe, notably in England, it is the rule to administer a preoperative roentgen-ray dose to the operative field. It has been shown experimentally that radiated cancer cells do not grow on transplantation. This has been taken advantage of by the surgeon, reducing to a minimum the risk of transplanting cancer cells during the surgical removal of carcinoma of the breast. Of course, this also applies to cancer situated elsewhere.

"Carcinoma of the prostate is treated like a carcinoma of the uterus; the same method of raying is adopted with the addition of radium applied by rectum. It is asserted that the results are equal to those in cancer of the uterus.

"The sarcoma dose as a rule is smaller than that of carcinoma, namely, from 60 to 70 per cent. that of a skin erythema dose. As a general rule, sarcomas are favorably influenced by roentgentherapy, especially lymphosarcoma in the early stage.

"Cases of osteosarcoma in the young responded to intelligent radiation, provided no general sarcomatosis was present. Osteomyelitis sinuses and fistula,

and tuberculous joints were treated with the same technic, with gratifying results. Multiple bone fistulas of several years' duration were shown to me completely healed.

"In uterine myomas a special technic has been adopted. Formerly, three or four series at three weeks' interval were administered. This protracted the establishment of amenorrhea over two or three months or longer. Nowadays the entire treatment is effected in one session of from one and one-half to two hours. At Opitz's and also Bumms' clinic, only two large fields are taken, one in front and one in the back. Each field is radiated for 40 minutes, in all 80 minutes. During the treatment, exact measurements are read from the iontoquantimeter in the vagina.

"In Erlangen, four fields are radiated for thirty minutes each, by means of a compression tubus. This compression appliance brings the surface of the body nearer to the tumor, and a greater amount of ray absorption can thus be obtained. The biologic dose for atrophy of the ovary is from 25 to 30 per cent. of a skin erythema dose.

"According to Seitz and Wintz, and other observers, 85 per cent. of fibroids either shrink or disappear entirely, and in virtually all cases castration results. Moreover, they assert, malignant degeneration of fibroids offers no contraindication to radiation, since radiation here is just as applicable as to any other cancer of the uterus."

In comparing X-ray machines and voltages, it should be remembered that the Germans' call coils transformers, and measure voltages by the peak volt-

age, which makes their readings higher than ours.

The General Electric Company, of Schenectady, informs me that the Furstenau Coolidge tube is practically the same as the large Coolidge tube with heavy target, that we have been using for treatment in this laboratory. Because of war conditions, the Furstenau Coolidge tube was manufactured in Germany, by the Allgemeine Electricische Gesellschaft of Berlin. The General Electric Company, of Schenectady, has now developed a still more powerful tube, for which we placed an order, that their agent declared was the first from this region. At any rate, we believe we are justified in hoping for results that will equal and very possibly surpass those secured heretofore.

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In the Comedy Relief section of the May issue of "The Bloodless Phlebotomist" a delightful satire entitled, "Too Late Now," by James Montague, gives a mirthful view of gland transplantation vs. euthanasia at sixty. This is only one of several worth while features of this publication. J. Petrie Hoyle, M. D., the first American physician to serve in Flanders during the World War, contributes a very interesting article on war injuries, and the article on "Treatment of Inflammation of the Fallopian Tubes," by Dr. J. Sidney Eason, Coldwater, is well worth reading.

If you have not received this little journal a request to The Denver Chemical Mfg. Co., New York City, will bring, without expense to you, the May number as well as future issues.









## COAST AND DESERT CLOUDINESS IN CALIFORNIA

BY DR. FORD A. CARPENTER,

Member American Climatological and Clinical Association.

The complaint that the climate is changing,—that never has there been such a cloudy and moist May, is heard every year throughout the coast district of Southern California. Physicians listen patiently to such laments, which rise in a chorus every spring-time, from Santa Barbara to San Diego on the seashore, and in the more inland places like Los Angeles and Pasadena. The facts are, that for probably more than a thousand years there has been no change in the climate if viewed progressively: i. e., it is not becoming colder or warmer, wetter or drier. The smallest number of clear days in littoral California are experienced during February and May. May is the more disagreeable of the two by reason of contrast. When the storms of February disappear, March is ushered in with clear skies; April is likewise relatively clear, so that when overcast skies make their appearance in May equal to the cloudy February, residents and tourists alike feel aggrieved. Californians and California visitors alike feel that whenever the sun is obscured, they are being cheated out of something that is rightfully theirs. Californians may be said to be an heliolatrous people; they are the sun-worshippers of the western continent.

Turning to the diagram which accompanies this article, (Fig. 1) it will be seen that a comparison is made between Los Angeles, near the coast, and Barstow on the desert. Both localities have minimum sunshine in February, but only in Los Angeles does a secondary minimum occur in May. The cloudiest months of the year have an average of 11 clear days in both February and May. The desert record shows that the most overcast month (February) has an average of 21 clear days. A ten-year

average gives October, November and December 18 days of clear weather in Los Angeles with a maximum of 21 days of cloudless skies in August. The march of sunshine throughout the year is graphically shown on this chart for both the coast and the desert of Southern California.

The reason that the coast and desert districts of this locality both receive the least amount of sunshine during February is that the winter storms reach their greatest frequency during that month. The relative infrequency of storms in the desert is shown by the fact that at Barstow the month averages 21 clear days, and that for the cloudiest month of the year. On the coast there is a distinct increase in cloudiness during May which is entirely absent on the desert. The reason is not far to seek. As soon as the short winter is over and spring begins in the desert (which is generally about the last of February) the temperature increases there and sets up an indraft from the sea, becoming most effective during May when the days are becoming warm and summer-like. On the coast, all is different: thick, ominous clouds make their appearance over the entire coast district of Southern California, and, in fact, over the greater part of the Pacific coast as well. Tourists and recent arrivals carry umbrellas but the old-timer shrugs his shoulders and says "Our days of 'high fog' are here," and has no fear of rain. The clouds are not rain-bearers, but *velo* clouds. Rain, in fact, is of infrequent occurrence so late in the season. The records of the Los Angeles Weather Bureau show that there are only two days with 0.01 inch or more of rain during an average May. "High-fog" is a misnomer, for meteorologists know no

distinction between fog and cloud save elevation alone. A fog is a cloud on earth and a cloud is a fog in the sky. Therefore, Californians revived the old Spanish term "velo" cloud when nam-

ing the veil-like cloud that hides the sun. The pronunciation of **velo** is identical with **veil**, **velo** becoming **vay-low**. The velo clouds are thickest near the coast and become gradually attenuated

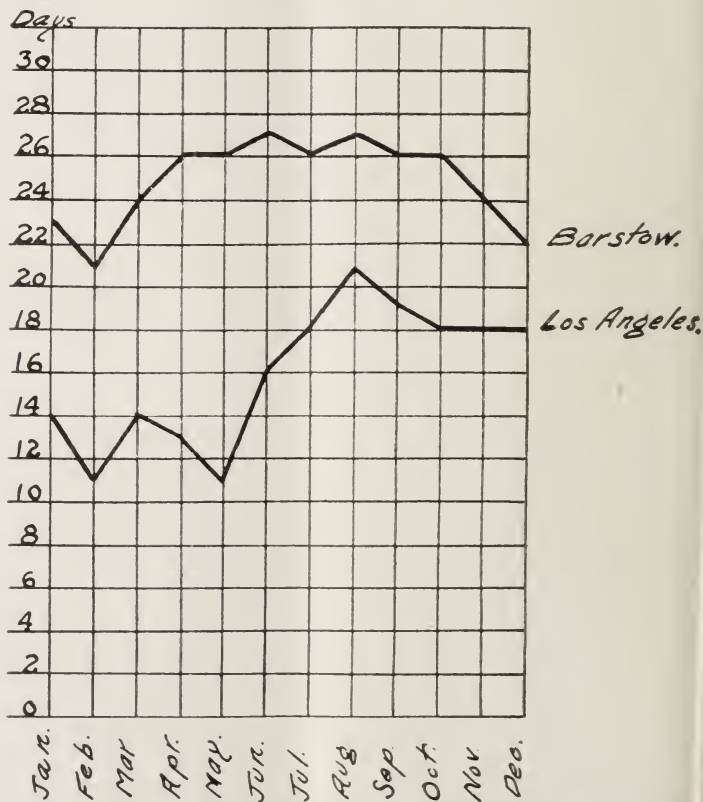
### COMPARATIVE CLOUDINESS ON SEASHORE AND DESERT.

Number of Clear Days by Months

(Records of 10 consecutive years)

Los Angeles station is indicative of the coast.

Barstow exemplifies the desert district.



Source of Data: Publications of U. S. Weather Bureau.

Note that the coast as well as the desert station shows the influence of the rainy month of February, while only the coast station is affected by the valo cloud (commonly known as "high-fog") which in the latter location is as effective in screening the sun and reducing the number of clear days as the storm clouds of the wettest winter month.

as they extend inland. They never appear beyond 60 or 70 miles from the seacoast. During the summer months, the velo clouds serve as grateful sunshades during the early morning and late afternoon hours.

The upper surface of the velo cloud is a beautiful sight when viewed from an airplane or a balloon of two or three thousand feet altitude. As an aeronaut, the writer has frequently flown over the upper surfaces which resemble nothing so much as the undulating waves of the sea. The accompanying photograph (Fig. 2) will give the reader an idea of the appearance of the velo cloud as it appears from below as well as from an altitude of 2,000 feet above the ground.

The physiological effect of the persistence of the velo cloud at its maximum period of occurrence in May is to bring about rheumatic and respiratory troubles. Common colds are difficult to

eradicate, and pulmonary afflictions are likewise more acute than during any other period of the year. The cool seabreeze, the high relative humidity, and the uniformly low temperature all combine to make the cloudy days of May an "unusual" meteorological condition. Most of the afflictions coincident with May weather either disappear or are at once alleviated by simply taking the prescription of a 50 or 100-mile motor trip from the then cloudy, dismal coast to the abundant sunshine and invigoratingly warm air of the desert. Dependent upon the thickness and extent of the velo cloud, it may sometimes happen that the motorist in search of sunshine may run out from under the cloud-blanket within an hour after leaving Los Angeles or Pasadena. It is a common experience for people with persistent coughs or colds to leave them behind as they motor away from coast cloudiness.

Department of Meteorology and Aero-nautics, Los Angeles Chamber of Commerce.

## FUNERAL OF PIONEER PHYSICIAN

DR. W. G. COCHRAN, Leading Local Practitioner for Many Years.

Final tribute will be paid to Dr. William G. Cochran, president of the State Mutual Building and Loan Association and well-known physician of Los Angeles for the past forty years, at the family home at 1550 West Second street today at 2 p.m. Dean McCornack of St. Paul's Pro-Cathedral will conduct the funeral services, which will be private. Interment will be in Roseale Cemetery.

Dr. Cochran died at his home Wednesday morning at the age of 77 years. Born in Ohio in 1844, Dr. Cochran started toward the West at the age of 16 years, moving to Illinois, where he enlisted for the Civil War two years later. He served three years in this conflict and was severely wounded in the Battle of Prairie Grove in Arkansas.

He was graduated from Rush Medical College in 1869, and practiced in Farmer, Ill., for twelve years. He then came to Los Angeles, where he became one of the most successful pioneer physicians. He was one of the organizers and first secretary of the Southern California Medical Society. Later he was a member of the Los Angeles City Board of Education for several terms and trustee of the Whittier State School for four years. Retiring from the medical profession, Dr. Cochran became founder and first president of the State Bank and Trustee Company, and founder of the concern of which he was president at the time of his death.

Dr. Cochran leaves a widow and one son, Dr. Guy Cochran, local surgeon.

The active pallbearers at the funeral



will be: Howard Wade, Harry Hunt, P. G. Cottle, Frank Sniff, Randolph Hunt and Dan Blair. Honorary pallbearers are: A. S. Halstead, A. N. Hunt, J. Ross Clark, W. J. Washburn, Dr. Walter Lindley, I. B. Newton, Dr. Dudley Fulton, A. A. Hubbard, Dr. W. W. Hitchcock, Dr. Rhea Smith and W. M. Garland.

The above from the Los Angeles Daily Times of May 6th gives a brief sketch of the life of one of the most forceful, stalwart characters the profession of Southern California has ever known.

He was a true and loyal friend and a witty, delightful companion. For many

years he had been a member of the California Club where he will be sorely missed. The California State Medical Society for many years held all of its meetings in San Francisco, until finally they had a meeting in Los Angeles which every person agreed was the most successful meeting the Society had ever held up to that date. Dr. Cochran was Chairman of the Committee of Arrangements and made a wonderful host. He was at one time vice-president of the State Medical Society. The profound sympathy of the medical profession is extended to Mrs. Cochran and their talented son, Dr. Guy Cochran.

## STATE BOARD OF HEALTH HYGIENIC LABORATORY

Summary of examinations made in the California State Hygienic Laboratory during the month of April, 1921:

Main Laboratory at Berkeley		Posi- tive	Nega- tive	Incon- clusive	Total	Units
Diphtheria .....	94	287	42†	423	423	
Diphtheria (Special Investigation)*.....	...	38	8†	46	46	
Diphtheria (Virulence test).....	1	3	...	4	80	
Dysentery (Blood) .....	...	1	...	1	5	
Gonococcus Infection .....	20	33	28	81	324	
Malaria .....	2	18	...	20	500	
Meningitis .....	1	...	...	1	5	
Rabies .....	3	11	...	14	700	
Syphilis (Wasserman test).....	231	970	138	1339	6695	
Tuberculosis (Sputum).....	37	110	...	147	441	
Typhoid (Excreta) .....	...	7	...	7	35	
Typhoid (Widal test).....	5	13	1	19	190	
Miscellaneous .....	...	...	...	5	25	
Pasteur treatments .....	...	...	...	125	1250	
† No growth.					2232	10,719

### Southern Branch at Los Angeles

Condition suspected:					
Diphtheria	167	664	15†	846	846
Diphtheria (Special Investigation)**	104	682	...	786	786
Gonococcus Infection	15	43	7	65	260
Malaria	...	4	...	4	100
Rabies	1	1	...	2	100
Tuberculosis (Sputum)	11	49	...	60	180
Typhoid (Excreta)	1	7	...	8	55
Typhoid (Widal test)	5	15	1	19	190
Miscellaneous	...	...	...	2	10
Pasteur treatments	...	...	...	8	280

### Northern Branch at Sacramento

Condition suspected:					
Diphtheria	...	4	...	4	4
Malaria	...	3	...	3	75
Tuberculosis (Sputum)	2	1	...	3	9
Typhoid (Widal test)	...	2	...	2	20
Pasteur treatments	...	...	...	89	890

	101	998
Main Laboratory at Berkeley	2232	10,719
Southern Branch at Los Angeles	1827	2,877
Northern Branch at Sacramento	101	998
Grand Total	4160	14,594

\*San Mateo.

\*\*Huntington Park, 77; Alhambra, 39; Manhattan Beach, 192; Olinda, 367; Fullerton, 69; Whittier, 42.

It will be seen from the above the State Board of Health has not yet made arrangements to do the Wasserman tests at the Southern Laboratory in the Pacific Finance Building, but we understand this step will be taken in July.

# SOUTHERN CALIFORNIA PRACTITIONER.

This journal endeavors to mirror the progress of the profession of California and Arizona

DR. GEORGE E. MALSARY - - - - - Editor and Publisher

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Subscription Price, per Annum, \$1.00 1414 South Hope Street, Los Angeles, Cal.

THE UNIVERSITY OF  
SOUTHERN CALIFORNIA.

The narrow-minded man will answer: "But the University of Southern California is a Methodist institution and the university of which you speak

should be non-sectarian.

Does anybody ever think of the University of Chicago as being a Baptist institution and not non-sectarian?

Chicago did not become a class A center until the Chicago University was established. Wall Street today is not responsible for the Greater New York to the degree that Columbia University, the New York University and the Uni-

versity of the City of New York are responsible for its world position.

Los Angeles is known today for its climate, its roads, its attractive shops and as an ideal place of retirement. Its standard is incomplete and will continue to be until, with masterful vision and ceaseless determination, its citizens center on this great educational need.

## EDITORIAL NOTES

Dr. Samuel D. Ingham has taken offices at 1920 Orange Street, Los Angeles.

Dr. Titian Coffey and Dr. Norman Williams are now associates with offices in the Marsh-Strong Building, Ninth and Main Street, Los Angeles.

Dr. Edmund Francis O'Reilly, age 32, of Lancaster, California, graduate of the Medical Department of the University of Southern California, was instantly killed in an automobile accident on March 16.

Dr. Adelaide Brown of San Francisco, California's distinguished woman physician who, a few weeks ago, underwent a serious surgical procedure, is again entirely well and has resumed practice with offices at 909 Hyde Street.

The death of Dr. Rilla Grafton Hay, wife of Rev. John C. Hay, at the residence of her daughter, Mrs. E. G. Gates, 2174 Echo Park Avenue, Los Angeles, removed from our midst the first woman physician to locate in Los Angeles.

Dr. Hay died April 7, 1921, age 71. She began practice in Los Angeles in 1876, and although absent for one or two periods, was in active practice up to a few months before her death. She was an educated, capable, conscientious physician, and her life was a credit to our profession.

The Journal of the A. M. A., April 30, 1921, contains valuable statistics pertaining to the State Board examinations. It shows that California, with a population of 3,426,861, has 6,766 licensed physicians, which is one physician to every 506 persons, thus leading the nation in its pro rata of doctors.

Our sincere felicitations go to Doctor George Piness, upon the occasion of his marriage on April 19th, to Miss Hortence Weil, of San Francisco. Doctor Piness left Los Angeles on April 17th and following the ceremony, which took place in San Francisco, the couple proceeded to Boston, where they will pass a part of the summer, and return to us on June 17th.

The following from the daily press is of interest to many Los Angeles friends as Miss Hogue is a graduate of the Training School for Nurses of the California Hospital:

Palo Alto, May 5.—Miss Elizabeth Hogue, recently appointed dean of women at Stanford University, tendered her resignation, which was accepted by the board of trustees. She has been connected with the Stanford School for Nurses for the past seven years, and was prominent in relief work overseas.

Miss Hogue, in handing in her resignation, announced her engagement to Dr. H. S. Moore of San Francisco.

The estate of Dr. John C. Ferbert, who died last December, was appraised at \$167,359.89, and paid an inheritance tax of \$5,163.35.

Dr. L. M. Coy, medical superintendent of the San Bernardino County Hospital, has resigned and July 1 will take up the practice of medicine in Uplands. At the meeting of the Los Angeles County Medical Association, held April 13, 1921, the following were elected to membership: Wm. Arthur Clark, M. D., 408 Central Bldg., Pasadena; E. D. Craft, M. D., 1100 W. 50th St.; Chas. S. Diggs, M. D., 736 E. 18th St.; H. M. Hall, M. D., 5503 Central Ave.; Frank L. Long, M. D., 543 Wilcox Bldg.; Arnold E. Savarien, M. D., 1015 Baker-Detwiler Bldg.; Robert H. Stanton, M. D., 1617 Mission St., South Pasadena.

In the Stillman divorce case, now in process in New York, an Osteopathist, one "Dr." Russell, who had been in professional attendance on Mrs. Stillman, testified that she told him that a half-breed Indian was father of her son. Her attorneys literally raged during most of the time Doctor Russell was on the stand, according to those who were present at the hearing, and scored him unmercifully for violating what they said he should have regarded as a sacred professional confidence.

#### Doctor Made Uncomfortable

Doctor Russell, who is a Chiropractor and Osteopath, is a short, heavy set man with reddish-gray side whiskers and pale blue, apparently near-sighted eyes that peer through old-fashioned gold-rimmed spectacles. He was given a very uncomfortable time of it by Abel I. Smith, attorney for Mrs. Stillman, who insisted that whatever Mrs. Stillman might have said to a doctor was necessarily a privileged confidential communication, and should have been held by a man of honor as sacred as the confessional itself."

#### Honored on 99th Birthday

A dinner in celebration of the ninety-ninth birthday of Dr. Stephen Smith of New York City, was given by the One Hundred Year Club at the Cooper Carleton Club, Chicago, on the evening of April 29. Dr. Smith was not present, but sent his greetings by telegraph.

Dr. O. O. Witherbee, the Los Angeles surgeon, while attending the Southern California Medical Society at Santa Ana suffered from ptomaine poisoning and was in the Santa Ana Hospital ten days. The doctor has fully recovered and is attending to his professional duties as usual.

Otheman Stevens, in a letter to the Examiner from Sacramento, says: "Leo Youngworth, the devoted Los Angeles Progressive Republican, came back today: 'I know nothing about the indeterminate sentence—I mean indeterminate franchise bill,' he said, 'and have no interest in it. My only and absorbing duty is to aid humanity by advocating the osteopathic bill. That is far above all sordid politics.' Mr. Youngworth is a radiant example of altruistic effort in the great mass of selfishly striving statesmen here." And to think that Leo and his Osteopathic pet were lost! Sad! Sad!! Sad!!!

Dr. John N. Osborn, formerly of Los Angeles, but now of Minneapolis, and Mrs. Barbara Stephens Zaue, daughter of Governor and Mrs. W. D. Stephens, were married at the Governor's mansion, Sacramento, April 25.

Dr. Osburn, who was one of the most distinguished oculists in the navy during the war, is now associated with the Nicollet Clinic, which is composed of seventeen men, all professors or associate professors in the medical department of the University of Minnesota. California has a real grudge against Dr. Osburn for stealing away one of her most beautiful native daughters.



Dr. V. C. Francis, formerly of Saskatoon, Saskatchewan, has located in Pasadena.

Dr. Robert H. Donnell, for the last three years lieutenant in the United States Navy medical corps, has located in San Diego.

Ceremonies incident to the transfer of the new \$200,000 Whittier hospital which Col. Simon J. Murphy, Jr., gave to that city, were observed on the hospital grounds Saturday, April 30.

According to the Riverside Enterprise, Dr. N. W. Janney of Los Angeles, by means of slides illustrated graphically to the Riverside County Medical Society and guests, the modern treatment in diabetes.

At the recent meeting of the Southern California Medical Society at Santa Ana there were three charter members

present: Dr. P. J. Parker of Elsinore, Dr. C. D. Ball of Santa Ana, and Dr. H. G. Brainerd of Los Angeles.

Dr. Rilla Grafton Hay of Los Angeles, the first woman granted a license to practice medicine in California, died after a lingering illness, on April 7, at the age of 71 years. She was graduated from the University of Iowa College of Medicine in 1873.

#### American Surgeons Honored

The Council of the Royal College of Surgeons of Ireland, on April 26, resolved to confer Honorary Fellowship on the following American Surgeons: Drs. William and Charles Mayo of Rochester, Minn.; Dr. George Emerson Brewer, of New York; Dr. George W. Crile, of Cleveland; Dr. Richard H. Hartz and W. W. Keen of Philadelphia, and Dr. A. J. Oschner of Chicago. The ceremony of conferring the honors will take place in the autumn.

## BOOK REVIEWS

**SURGERY OF THE UPPER ABDOMEN.** By John B. Deaver, M.D., Sc. D., LL.D., F.A.C.S. Barton Professor of Surgery in the University of Pennsylvania. Surgeon-in-Chief to the Lankenau Hospital, and Surgeon to the University Hospital and Astley Paston Cooper Ashhurst, A.B., M.D., F.A.C.S. Associate in Surgery in the University of Pennsylvania, Surgeon to the Episcopal Hospital, Philadelphia, Colonel, Medical Reserve Corps, U. S. Army. Second edition with 9 colored plates and 198 other illustrations, Philadelphia, P. Blakiston's son & Co., 1012 Walnut street. Price \$14.00 net.

The first edition of this work was published in two volumes: the first volume, comprising the surgery of the stomach and duodenum, appeared in 1919; and the second, which included the surgery of the gall-bladder, liver, pancreas and spleen, in 1913. So very favorable was its acceptance by the profession, that the publishers soon called for another edition; and work on the revision was well advanced when interrupted by the war. During the two years since the armistice the revision has been resumed. While the general plan of the book remains unaltered, many sections have been entirely re-

written (e. g., gastric ulcer, infantile stenosis of the pylorus, chronic dilatation of the duodenum, causes of death after operations on the stomach and duodenum, jejunal and gastro-jejunal ulcer, etc.), much new material added (e. g., in the chapters dealing with operative technique, particularly the transgastric excision of ulcers, resection of the descending duodenum, cholecystectomy and operations on the bile ducts, and the surgery of the spleen), and some that was obsolete omitted.

There is food for thought in the remarks on The X-rays in Diagnosis of Lesions of the Upper Abdomen. "In cases where the clinical history and ordinary methods of physical examinations leave the diagnosis in doubt, or where it is desired to obtain confirmation of diagnosis, roentgenology often will be of material assistance. There is but one objection to the use of the



X-ray in this connection, and this is the fact that it is useless unless employed by an expert in this particular branch of X-ray work. The technique employed is so complicated, and demands such close study, that a description of it would be entirely out of place here; but it is necessary for the clinician who is to take advantage of work being done by expert roentgenologists to realize what aid may be given them, and what preliminary preparation of the patient is necessary to render the skiagraphic examination of value." We may add our commendation of co-operation between clinicians and roentgenologists, which is altogether desirable. It is probable that many clinicians will invest unnecessarily in X-ray apparatus, just as in the past well as the present there is a tendency to over-investment in various sorts of laboratory equipment, not for show but with a sincere intention to use the same. The physician who is worth while as a clinician, cannot afford to keep abreast with the developments of laboratory work, but he should be able to evaluate the reports of roentgenologists and he should know the laboratory men in his community, their ability and reliability.

There is so much of interest and value in this work that a short review that is at all satisfactory is very difficult. Deaver and Ashhurst are well known surgeons and clinicians, and here they have demonstrated anew their ability as meaty writers.

**TUBERCULOSIS OF CHILDREN.** Its Diagnosis and Treatment, By Professor Dr. Hans Much, Director of the Department for the Science of Immunity and for the Research of Tuberculosis at the University of Hamburg, Germany. Translated by Dr. Max Rothschild, Medical Director of the California Sanatorium for the Treatment of Tuberculosis, San Francisco and Belmont, California. New York: The Macmillan Company, 1921.

The sceptical attitude of the medical world respecting new discoveries relating to the treatment of tuberculosis, is, in a sense, justified by the many disappointments which have been experienced during the last twenty years.

When, however, a method is presented for investigation, supported by authentic research and logical deductions, old prejudices ought to be laid aside long enough for its fair and unbiased consideration. This volume, edited by Hans Much, presents the results of the co-ordinated efforts of himself and George Deycke of Hamburg. These men are representative of the world's leading tubercular therapists, and are well known to the medical profession, the one by his discovery of Much's granula, and the other by his Nastin investigation in the treatment of leprosy. Their assertions of the value of their latest discovery, the partial antigens or "partigens," are most emphatic, and they can be verified by other therapists. Much and Deycke have given the world a method of treatment which equals in its importance any medical discovery made during the last century. The translation here presented is divided into a general treatise of Much's startling theories of immunity and a special section which is translated of one of his latest monographs, "Tuberculosis of Children." The ideas advanced and the comparisons made are, in many instances, very apt and unique; and Much's manner of drawing deductions makes this volume most convincing and intensely interesting.

It might be advisable to add a few words regarding the preparation and the use of the partial-antigens, or partigens. They are prepared from tubercle bacilli in the following manner: The cultures are carefully broken up with physiological salt solution which contains  $\frac{1}{2}$  per cent lactic acid and this solution is put in an incubator at a 65° C. until the acid-fastness of the bacilli has entirely disappeared and until it is no longer possible to stain even Much's granula (after the method of Gram-Much). This disintegrated substance, which is called MTb., is filtered, the

water-soluble part, which contains the toxin of the tubercule bacilli and represents the pure tuberculin, is called L. The residuum, non-soluble in water, is called M.Tb.R. This again is treated with alcohol and ether and represents the three partial-antigens; first, the fat-acid-lipoids, which are soluble in alcohol, called F.; second, the neutral fats, high molecular fats or wax alcohol, soluble in ether, called N.; third, an entirely non-soluble residuum, a high molecular albuminous substance, which contains a large amount of phosphorus and belongs most probably to the group of nucleoproteids and is called A. Of these partigens only the M.Tb.R. and the special partial antigens, A. F. and N., come into consideration for treatment. The pure tuberculin L. is not used at all, or only in exceptional cases. The following original solutions have been put on the market: M.Tb.R. and A. 1: 100,000, F. 1: 10,000, and N. 1: 1000. The further dilutions can be made from these original dilutions, or any desired dilution can be ordered from the chemical works of Kalle & Company, Biebrich-on-Rhine. All dilutions can be kept for a long time. To simplify matters the dilutions of 1: 1000 are called No. 1 and the other dilutions are called accordingly No. 2, No. 3, etc. The following dilutions are commonly used: M.Tb.R. and A. Nos. 3 to 9, F. Nos. 2 to 8, N. Nos. 1 to 8. Before any treatment is started, intracutaneous injections with the different partial-antigens are made, and from the skin reactions it is possible to ascertain the immunity titre of the individual. According to these skin reactions, which result in from two days to two weeks after the injections have been made, the treatment with the respective partial-antigen is begun.

**A MANUAL OF SURGERY.** By Francis T. Stewart, M.D. Formerly Professor of Clinical Surgery, Jefferson Medical College; Surgeon to the Pennsylvania Hospital. Fifth Edition, with 590 illustrations. Philadelphia, P. Blakiston's Son & Co., 1012 Walnut Street. Price \$10.00 net.

The manuscript of the fifth edition of this manual was practically completed by Dr. Stewart at the time of his death. His revision included radical changes in and many additions to those portions dealing with surgical technic, surgical infection and disinfection, wounds, effects of, heat and cold, shock, plastic operations, blood-transfusion, fractures, and amputations; also the bones, joints, nerves, chest, intestines, rectum, kidney and bladder. He wrote a new chapter on unnecessary abdominal section and rewrote the sections on the abdomen, stomach, operations on the stomach, intestines, intestinal obstruction, biliary passages and the pancreas. At the suggestion of Dr. Stewart, a study of military surgery was begun in 1915 with the service of Walter Estell Lee, M.D., in the French army and continued until his discharge from the American army in 1919. The results of this military experience have been incorporated in this edition. In this latest and most elaborate edition, Stewart's Manual of Surgery well maintains its position of usefulness to the medical student and busy practitioner who would gladly escape all excess verbosity, but demand a reliable work that is sufficiently elaborate.

**HUMAN PHYSIOLOGY.** Especially adapted for the use of medical students. By Albert P. Brubaker, A.M., M.D. Author of "A Text-book of Physiology;" Professor of Physiology and Medical Jurisprudence in the Jefferson Medical College; formerly Professor of Physiology in the Pennsylvania College of Dental Surgery; Formerly Lecturer on Anatomy and Physiology in the Drexel Institute of Art, Science and Industry; Fellow of the College of Physicians of Philadelphia. Fifteenth Edition with 26 illustrations. Philadelphia; P. Blakiston's Son & Co., 1012 Walnut Street. Price, \$2.00 net.

Various paragraphs have been rewritten, new ones added and the text in some sections revised and rearranged, all of which will be helpful in the understanding of the topics by the student body for whom the Compend has been primarily prepared. The book is a compact and convenient presentation of some of the essential facts of physiology which have a bearing on problems of clinical medicine.

**ELECTROTHERAPY.** For Practitioners and Students, By Burton Baker Grover, M.D., President of the Western Electro-therapeutic Association; Member of the Radiological Society of North America, American Medical Association, Medical Society of Missouri Valley, Colorado State Medical Society, El Paso County Medical Society, Colorado Springs Clinical Club, Etc. Illustrated with 103 engravings in the text and 6 plates of 12 charts. Philadelphia: F. A. Davis Company, Publishers, 1921. Price, \$4.00 net.

This work gives practical instruction covering the indications and use of the various electric currents in practice. The subjects treated, in the main, are briefly considered, but up to date. An effort has been made to boil down the subject of electrotherapy and to treat it in such a manner that it may be understood and made useful not only to every electrotherapist but to the entire medical profession. Some undertaking!

**PULMONARY TUBERCULOSIS.** By Charles Sabourin, M.D., Medical Director of the Durtol Sanatorium, Puy-de-Dome, France. Authorized English Translation from the Sixth, Revised and Enlarged French Edition. Philadelphia: F. A. Davis Company, Publishers, 1921. Price, \$3.50 net.

The main factors in this purely hygienic system of treatment are three in number: (1) The patient must live in pure air, both by day and night. (2) All mental and physical fatigue must be eliminated. (3) The diet must be wholesome and abundant. This seems very simple, and all tuberculous persons, provided they have the means to carry it out, should get well or live for an indefinite period. In practice, however, matters are not so easy. These 440 pages will help the physician in such cases.

**NEW MEDICAL FORMULARY.** With an appendix containing Formulae and Doses for Hypodermic Medication, Posological Table; Obstetrical Table; Table of Apothecaries and Metric System of Weights and Measures; Fracures. Dislocations and Sprains; Ligations of Arteries; Hemorrhages and Wounds; Treatment of Asphyxia and Apnea; Poisons and Antidotes; Incompatibilities and Baths; Miscellaneous Emergencies; Tables of Differential Diagnosis, Eruptive Fevers, Diet Lists for various Diseases; Materials and Drugs Used in Antiseptic Surgery; Formulae for Fluid Foods, etc. By William Edward Fitt, M.D., Late Major Medical Reserve Corps, U. S. A., formerly Lecturer on Surgery, Fordham University School of Medicine; Assisting Attending Gynecologist Presbyterian Hospital dispensary; Attending Physician to the Vanderbilt Clinic, College of Physicians and Surgeons, New York City; Member of the American Medical Editors' Association, Member of the Medical Association of the Greater City of New York, etc. Third Edition, revised. Philadelphia, F. A. Davis

Company, Publishers, 1921. Price, \$2.50 net.

In preparation of the copy for this third edition, changes have been made in the genitive endings of numerous formulae so as to conform with the latest revision of the U. S. Pharmacopeia. Many new formulae have been added, making the book of greater value to physicians, students and pharmacists.

**EYE, EAR, NOSE AND THROAT NURSING.** By A. Edward Davis, A.M., M.D., Professor of Diseases of the Eye in the New York Post-Graduate Medical School and Hospital. And Beaman Douglass, M.D., Professor of Diseases of the Nose and Throat in the New York Post-Graduate Medical School and Hospital. Second Revised Edition. With 22 illustrations, Philadelphia; F. A. Davis Company, Publishers, 1920. Price, \$2.50 net.

In the second edition of this work every chapter has been carefully revised, new matter incorporated, and an entirely new chapter on Vaccine and Serum Treatment added. This is an excellent guide for nurses and students in the care of the various diseases of the eye, ear, nose and throat; and instructs the nurse as to her duties during and following operations upon these organs.

**PRACTICAL TUBERCULOSIS.** By Herbert F. Gammons, M.D., Superintendent, Woodlawn Sanatorium, Dallas, Texas; Assistant Instructor in Clinical Medicine, Baylor Medical College, Dallas, Texas; Formerly Resident Physician, Cullis Consumptives' Home, Dorchester, Mass.; Assistant Physician, Massachusetts State Sanatorium, Rutland, Mass.; Assistant Superintendent, Connecticut State Sanatorium, Meriden, Conn.; First Assistant Physician, Texas State Tuberculosis Sanatorium, Carlsbad, Texas; and Superintendent, Deerwood Sanatorium, Deerwood, Minn. Introduction by J. B. McKnight, M.D., Superintendent and Medical Director, Texas State Tuberculosis Sanatorium, Carlsbad, Texas. Illustrated; C. A. Mosby Co., Publishers, St. Louis, Mo., 1921. Price \$2.00.

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## GASTRO-INTESTINAL DIAGNOSIS

BY GEORGE E. MALSBARY, M. D.

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The history of the development of the use of the Roentgen ray in the investigation of the anatomy, physiology and pathology of the gastrointestinal tract, is intensely interesting. In this article, we quote freely from George and Leonard, who have done so much to popularize what they denominate the direct method. In the Roentgen investigation of the gastrointestinal tract, two schools have developed. One, the Continental school from which the pioneer work came; the other, the American school. Great credit must be given to the early investigators for their very thorough and exact work. Unfortunately they built up their technique on questionable ground and soon arrived at a point where no further advance could be made. Let us outline briefly the two schools.

### Indirect Method

The Continental investigators, Reider, Rosenthal, Holznecht, Haenisch and others, were forced by the neces-

sity of their clinics to depend upon the Roentgenoscope almost entirely. Their clinics were large, lacked efficient apparatus, and expense was a consideration; so that altogether Roentgenoscopy seemed the simplest and best method to use. Consequently their work has been based upon the signs and findings which could be brought out by Roentgenoscopy. From this basis of diagnosis, they evolved what has been called the "symptom-complex." That is, a number of Roentgenoscopic and clinical signs, largely of a functional nature, were grouped together, and on these their diagnoses were founded. Among the signs upon which a great deal of stress was laid, for example, in the study of gastric ulcer, were peristalsis, antiperistalsis, hyperperistalsis, increased and diminished emptying time of the stomach, various spasms, six-hour gastric residue, pressure tender-points, and the clinical history including the laboratory findings. Without doubt, much valuable data was obtained from this



study and up to a certain point progress made in the diagnosis of diseases of the gastrointestinal tract. It has been found, however, that this method of study, especially when applied to the duodenal region, has frequently proved inadequate, not altogether in individual cases, but in studying collectively a series. Many cases were classed as negative which, in the light of our knowledge, must have yielded positive pathological data if a more careful study had been made. It is fair to say that the diagnostic errors were not so much errors of commission as of omission. Many investigators, especially Americans, felt the necessity for more accurate diagnosis than was possible with this method.

#### Direct Method

To Lewis Gregory Cole of New York must be given a great deal of credit, who as pioneer broke away from the early teachings of the Continental school. He was the first to demonstrate, by means of serial plates, the actual anatomical variation produced by the lesion. It was on this direct Roentgen evidence, viz.: the exhibition of the very lesion itself, that Cole based his diagnosis. This method is called the direct method of the American school, in contrast to the indirect method, or Continental school, in which the diagnosis is based on a somewhat uncertain combination of clinical symptoms and varied Roentgenoscopic manifestations of motility. In our practice we endeavor as far as possible to apply the principles of the direct school. In each case we try to show on the plate the actual lesion.

#### Meals

The meal most favored by the Continental workers, and still used today by many, is the standard Reider meal. This originally consisted of forty grammes of bismuth subcarbonate and three hundred cubic centimeters

of cooked cereal. Later, an equivalent amount of barius sulphate was substituted for the bismuth. Thousands of cases have been studied with this meal and much valuable data has been accumulated. However, American investigators found the Reider meal too coarse. It failed to fill out the duodenum completely enough for an accurate observation and made the visualization of the appendix quite improbable and a rarity. Roentgenologists then began to use other media, such as artificially prepared milk, buttermilk, etc. With such a medium it was possible to demonstrate lesions from the start. It easily filled our crevices and folds. It is quickly prepared, easily obtainable and quite palatable. Incidentally it was found that the bismuth was kept in suspension a longer time throughout the gastro-intestinal tract than with all other meals. As a consequence, the constant demonstration of the appendix among other conditions in the right lower quadrant is practicable. It is necessary with the buttermilk meal to use two to three times the amount of bismuth or barium contained in the Reider meal. As a result of the marked variation between the two meals, it is incorrect to use the same functional data for diagnosis in comparing the buttermilk meal with the Reider or cereal meal. Conclusions drawn as to the emptying time of the stomach, six-hour gastric stasis, position of the head of the bismuth column in six hours, etc., using the buttermilk bismuth or barium meal, cannot be compared with the same cases if the Reider meal is used. This is a point which has not been thoroughly appreciated by our Roentgenologists. Either through lack of care or interest, they have used all kinds of media, buttermilk, plain milk, water, potato pap, malted milk, soup, cereal, etc., and have varied not only the amount of

bismuth or barium, but have given double meals, half of a meal, and divided meals in various ways so that results obtained in their studies cannot be standardized. Yet, in spite of this, these investigators have continued to publish their observations based on the deductions of the Reider technique, which they did not employ. Obviously they cannot be correct. The only course left for those who wish to use this functional data is to adhere strictly to the technique of Reider, Rosenthal and others, and accumulate a large number of cases. If we attempt to vary the mixture in any way, we must check up on our work by the operative results. Finally, let us emphasize the importance of a standard meal. Only with a uniform meal and technique can the results of different investigators be correlated. The simple buttermilk meal is satisfactory and fills out the duodenal cap and the appendix to better advantage.

### General Routine and Technique

The patient presents himself for examination in the morning without breakfast. A cup of coffee and toast at least two hours before the examination in no way interferes. Plates are first made of the gall-bladder region. Frequently the entire abdomen is examined to rule out kidney stone and also to obtain some idea as to the distribution of gas, the general size and position of the liver, spleen and kidneys. Such a plate is frequently valuable as a record for comparison with the plates made after the bismuth has been given. The meal is given to the patient in two glasses. As the first is taken the patient is studied with the Roentgenoscope, attention being paid to the oesophagus and the manner in which the stomach fills. The second glass is taken at once and the first plate then exposed.

### Normal Stomach

The normal stomach is a collapsible bag, hanging free in the abdominal cavity. It is fixed at the cardiac orifice and somewhat loosely held along the lesser curvature by the gastro-hepatic ligament. It must be borne in mind that the size of the normal stomach depends absolutely on its contents and that its shape depends, in a great measure, on the surrounding organs. A thorough acquaintance with the normal stomach and its normal variations is fundamental for a recognition of any pathological condition. Our conception of the normal stomach is based on the Roentgen picture made within five minutes following the regular meal. The exposures are made both with the patient upright and prone, the plates against the abdomen. The stomach can be divided into a larger cardiac part and a smaller pyloric part. The cardiac portion consists of the fundus and body, sometimes called the *pars media*, the fundus, according to Hertz, being the segment of the stomach which lies above a horizontal plane passing through the cardiac orifice. In the erect position the body of the stomach is situated entirely to the left of the middle line and is either vertical or inclined slightly towards the right. The pyloric portion consists of the antrum, or *pars pylorica*, and the pylorus. The "incisura angularis" has sometimes been described as separating the *pars media* from the *pars pylorica*. This is a sharp indentation on the lesser curvature. We have found this incisura to be rather inconstant, particularly with the full meal. The *pars pylorica* or antrum is directed upwards and somewhat backwards. It narrows gradually and ends at the pylorus. The pylorus appears as an isthmus of bismuth connecting the stomach with the first portion of the duodenum. It varies from a quarter of an inch in di-

ameter to the size of a thread. It is usually from one-quarter to a third of an inch in length. The shape of the stomach depends to a great measure on its muscular tone and on the surrounding organs. The lesser curvature has a more or less rigid attachment so that changes in size and shape take place at the expense of the greater curvature. Various kinds of normal stomachs have been described, such as fish-hook, cow's horn, and text-book types. The muscular tone of the gastric walls is one factor in determining the shape. A hypertonic stomach is likely to be high up in the abdominal cavity, occupying a horizontal position with active peristalsis. On the other hand, an atonic stomach will be low, the greater curvature may reach the pelvic brim, the general axis will be vertical rather than horizontal, and there will be little evidence of peristalsis. Such a stomach will be of the "fish-hook" variety. There are all grades between these two types and all within the normal limits. The development of the individual has a bearing on the shape and position of the stomach. For instance, a stout individual with considerable abdominal fat will show a very high stomach. In fact, frequently the body of the stomach will be held so high that in the anteroposterior view it will actually overlie the pylorus and duodenum. On the other hand, in a thin, emaciated individual the stomach, not having any supporting abdominal fat, will be found resting down in the true pelvis. Each type of stomach is normal for that particular individual. Extreme pressure may give a variation to the outline of a normal stomach. Pressure from the spine in a prone position may give an apparent defect in the antrum or body of the stomach. Pressure from a distended colon, particularly at the splenic flexure, may give a peculiar irregularity

in the greater curvature. Enlarged spleen, or kidney, cysts of the pancreas, ascites, all these may produce distortions of a perfectly normal stomach.

### Gastric Ulcer

The lesion commonly known as gastric or peptic ulcer is a circumscribed area, varying in size from a pinhead to half a dollar. It is usually situated near the pylorus and, with few exceptions, involves either the lesser curvature or posterior wall. This lesion is characterized by a loss of tissue involving the mucosa and frequently the deeper layers. These ulcers, which clinically and pathologically are distinct from "erosions," tubercular, syphilitic and various traumatic ulcerations of the stomach wall, show little tendency to heal. Gastric ulcers tend to become "chronic" ulcers before healing takes place. Shortly after the onset of an ulcer, nature attempts repair. The result is a deposition of chronic inflammatory tissue in and about the lesion. This inflammatory reaction within a few weeks may become a palpable induration, which in turn causes more or less deformity in the stomach wall. It is the demonstration of the presence of this deformity that permits us to make a positive Roentgen diagnosis of gastric ulcer. The ease and accuracy with which the diagnosis is made varies directly with the degree of deformity. In so far as chronic gastric ulcer is concerned, we rely, as in the case of duodenal ulcer, on the direct method; namely, the exhibition on the Roentgen plate of the actual anatomical defect.

### Technique

For the demonstration of gastric ulcer we use the same meal previously described; in brief, two ounces of the specially prepared barium sulphate to two glasses of buttermilk, amounting

to one pint. This is taken on an empty stomach. While we appreciate the value of the Roentgenoscope in competent hands, and, in fact, all our patients are examined in this way, still in the last analysis it is the serial plate upon which we rely for diagnosis. In the first place, the problem of gastric ulcer in a large measure is a study of detail. We look for minute changes and slight irregularities in the barium outline. These can be seen with greater accuracy and ease on the plate than on the fluorescent screen. Then again, in the plate we have a permanent record, while with the screen our opinion has to be based on an uncertain remembrance of a passing vision. Without doubt the screen is of great value in demonstrating motion and is, therefore, our greatest aid in showing abnormalities of gastric physiology. But such abnormalities, at best, interest us only when considering the presumptive or indirect evidence of gastric ulcer. Repeated or serial plates are essential to demonstrate the permanency of a shadow. A typical hour-glass appearance, for example, may be seen on two or three plates, but on the fourth plate we may get the shadow of a normal stomach. In the demonstration of the constancy of large defects, the Roentgenoscope serves well and is, to be sure, a saving in plates and time. As for the best position in which to take plates, we find the ordinary postero-anterior position the most useful, the patient standing with the plate against the abdomen. It is in this position that ulcers are likely to show, for the reason that seventy-five to eighty per cent occur on the lesser curvature of the stomach. In the upright, postero-anterior position the lesser curvature is brought into profile. However, in this position there is often difficulty in filling out the antrum. In such a case

an posterior-anterior plate with the patient prone will remedy this difficulty. Twenty to twenty-five per cent of gastric ulcers occur on the posterior wall. These ulcers are frequently shown to a better advantage by taking the plate with the patient in the lateral position, either standing or lying, the plate against the patient's right side. Each patient is an individual problem and the plates must be taken as the needs of the case indicate. This is of special importance in considering the interval between plates and the number of times a patient should be examined by the Roentgenologist. In general, a patient should be studied by the Roentgenoscope while taking the barium meal and serial plates made immediately after and again at six and twenty-four hours.

#### The Positive (or Direct) Evidence of Gastric Ulcer

The following five variations from the normal shadow are of fundamental importance in the diagnosis of peptic ulcer, and appearing singly or associated they are nearly pathognomonic of this lesion.

A—Barium in the ulcer crater.

B—Passage of barium through the gastric wall due to a chronic perforation.

C—Defect in the barium shadow from induration in the gastric wall.

D—Permanent hour glass stomach.

E—Pyloric obstruction, other than from new growth.

#### Demonstration of the Ulcer Crater

Plates taken in the ordinary postero-anterior position, either standing or lying, bring into profile the lesser and greater curvature. Any break in the outline of the curvatures will be detected at once. Frequently a small speck of barium can be seen apparently exuding from the main barium shadow. This represents bar-



ium actually in the crater of the ulcer, and is unquestionably pathognomonic of ulcer. Only when the ulcer is in profile can its crater be shown in this way. Though eighty per cent occur on the lesser curvature and are naturally thrown into profile in the posterior-anterior position, still the crater is likely to be filled with secretions or food debris and the barium may not penetrate.

### **Demonstration of Chronic Perforating**

#### **Ulcers**

Occasionally ulceration proceeds so far that there is actual perforation of the gastric wall. The Roentgen picture of the chronic perforated ulcer is characteristic. It merely represents a stage later than the simple ulcer. The picture of the perforated ulcer shows barium actually outside the stomach wall, confined in a small sack or pouch. This sack is formed by walls of connective tissue. It is the result of nature's endeavor to heal and prevent the impending perforation. The pouch may vary from the size of a pea to that of a walnut. Usually there can be seen the thread-like isthmus connecting the pouch with the stomach. Along with the barium, the pouch may contain a gas bubble. It is frequently noted that the barium in the pouch will be retained after the stomach is empty. This condition is also favorable for demonstration in the ordinary posterior-anterior position from the fact that perforations almost invariably occur on the lesser curvature.

### **Demonstration of Area of Induration**

While in many cases we cannot demonstrate the ulcer itself, we can, however, demonstrate the area of induration about the ulcer. This area of induration produces a local rigidity in the stomach wall. It is this local rigidity, or lack of flexibility, which we demonstrate on the plate. The

taking of many plates is important. On the several plates will be seen an area, usually on the lesser curvature, half an inch to two inches in diameter, over which there is no evidence of peristaltic waves. Sometimes repeated exposures at one-quarter second intervals on the same plate with the position of the patient unchanged will demonstrate this condition. Such a plate shows a blurred outline of the stomach, save over the area where there is no movement. This localized area of rigidity indicates pathology involving the stomach wall. We have here found the Roentgenoscope and palpation useful in checking up the Roentgenograms. The question may be asked, does an indurated area such as this occur only in chronic ulcer? Theoretically, no, but for practical purposes, yes. It is conceivable that a new growth might give a similar picture, but it is not the characteristic picture of new growth. And further, a chronic ulcer showing this induration will invariably present one or more characteristic signs of ulcer. In addition to rigidity, the indurated area may produce a filling defect causing an irregularity in the gastric shadow. This irregularity simply means infiltration and of itself is not characteristic of ulcer.

### **Demonstration of Organic Hour-Glass**

#### **Deformity**

The organic hour glass must be differentiated from the functional or spasmodic hour glass. Repeated plates are usually sufficient to rule out spasmodic hour glass. Then again, the Roentgenoscope and palpation can show whether or not the contraction is permanent. In doubtful cases the administration of atropine will relax the spasmodic hour glass. The organic hour glass is practically pathognomonic of chronic ulcer. Actual irritation from the ulcer produces spasm of



the circular fibres in the plane of the ulcer. Later, there is undoubtedly stiffening or actual infiltration in the fibers, making the contraction rigid or permanent. The exceptions are rare cases of hour-glass deformity due to new growth and adhesions. The hour glass of new growth usually presents a funnel-like form, while that of chronic ulcer is sacculated. The sulcus in new growth is likely to be broad and irregular, while that of ulcer is band-like and smooth in outline. The connecting isthmus in the hour glass from ulcer is eccentric, usually being a part of the lesser curvature, while the isthmus in malignant hour glass is in the center, producing a symmetrical annular defect in the gastric shadow. Rarely do adhesions produce an appearance simulating hour glass. Occasionally post-operative adhesions will tie the stomach to the abdominal wall at the site of the incision, which may produce an hour-glass appearance. It is possible that mesenteric bands may also distort the stomach in such a way as to suggest a constriction.

#### Demonstration of Pyloric Obstruction

The normal stomach empties the barium buttermilk meal within six hours. However, we do not lay much stress on any gastric residue under twelve hours. An eighteen to twenty-four hour residue means organic stenosis at the pylorus. Benign cicatrix, new growth and adhesions are the three causes of pyloric obstruction. Benign cicatrix or chronic ulcer, in the majority of cases, has its own characteristic picture. It is of long standing and therefore is associated with secondary dilatation and hypertrophy of the stomach. Violent peristaltic waves suggest chronic ulcer. Obstruction from new growth is of short duration and is associated with a small stomach. Careful study of the pyloric

FIVE—Hoffman Press Practitioner region in the different positions will usually show the characteristic deformity of cancer. The deformity of cancer is quite characteristic, being an inroad on the gastric shadow and usually annular.

#### The Presumptive (or Indirect) Evidence of Gastric Ulcer

Gastric ulcer, if carefully studied in the way that has been suggested, will give some positive evidence of its presence. However, it is on chronicity of the ulcer that the accuracy of the diagnosis depends. And it is reasonable to suppose that there may be certain acute ulcers of such recent origin that there has been insufficient time to produce any appreciable deforming induration. We are led to suspect the presence of such ulcers by certain presumptive or indirect evidence. And we emphasize the word "suspect," for this evidence is indeed far from pathognomonic. Spasm of the pyloric phincter is indicated by a greater or less period of delay before the stomach begins to empty. The normal stomach begins to empty immediately on taking the meal. Delayed relaxation of the pyloric phincter results in delayed emptying of the stomach, so that an eight to ten-hour gastric residue is worthy of note. Spasm of the circular fibers in other parts of the stomach is shown on the plate as an incisura, usually on the greater curvature. These indentations are more or less persistent and the greater their persistency, the more valuable they are as evidence. Without much doubt most acute gastric ulcers are accompanied by a certain amount of spasm of the circular fibers lying in the same plane as the ulcer. The Roentgen picture is simply that of an indentation on the greater curvature opposite the site of the ulcer. It must be borne in mind that these incisurae may be produced by

various drugs and even by nervousness. An extreme spasm may produce such marked incisurae that the stomach assumes an hour-glass appearance. This spasmodic hour-glass condition means nothing more than a simple incisura and must not be confused with the organic hour-glass deformity. As is mentioned elsewhere, the administration of atropine will easily differentiate spasm from organic deformity. In our experience the various abnormalities in peristalsis or abnormal conditions of gastric tone bear no certain relation to the presence or absence of acute gastric ulcer. A tender-point over the gastric shadow, demonstrated by Roentgenoscopic palpation, bears no relation to the presence or absence of ulcer.

#### Gastric New Growth

The routine use of the Roentgen ray in the diagnosis of gastric cancer has now come to be recognized as one of the most important means of diagnosis. We believe it is fair to state that the newer methods of chemical examination of the stomach contents, such as the glycltryptophan test and the phosphotungstic acid reaction of Wolff, give results which are unstable and upon which no firm foundation can be laid. The same is true of the present status of the serum tests for cancer, such as the haemolysis test and the modified Abderhalden reaction. Even if positive, the latter give no hint of the location of the growth. In short, the situation at the present time as regards the possibility of making a reasonably early diagnosis of gastric cancer from clinical data alone is practically hopeless. Smithies of Chicago, in a paper before the American Association of Gastroenterologists, stated that there was no one dependable sign on which to base the diagnosis. All this, however, refers to the methods of gastrointestinal

study. With the Roentgen method, on the other hand, we have a means at our disposal which we believe has already shown itself to be of distinct value in detecting early carcinoma. It is not to be inferred that the method is today an absolutely positive one, or that every case can be detected in its incipency; but we do wish to state emphatically that we are already in the possession of certain evidence which pushes the limits of diagnosis much further than can be done today by any other method of examination.

The Roentgen diagnosis of gastric carcinoma can be classed under two headings. First, there is the early recognition of early cancer. Secondly, there is the recognition of latent cancer, which is usually advanced cancer without symptoms. In this second group may also be included those cases about whose diagnosis there is no doubt clinically. Such cases are usually advanced and the Roentgen ray is useful as confirmatory evidence, or in giving a more accurate prognosis. The Roentgen examination in cases of this second group, while interesting and settling matters for the patient, does not help much because this type of case is not early enough to give hope of cure. The recognition of early cancer is the diagnosis that is of real value both to the patient and to the surgeon. In this instance we have distinct hopes of detecting the cancer early enough to obtain radical cure by surgery. This is the type of lesion which gives very obscure and few gastric symptoms. There is usually no obstruction, the acidity may be practically unchanged, there is, of course, no lactic acid, and there may be no blood in the gastric contents or stools. The data upon which even an exploratory examination could be advised are therefore slight. These lesions are quite small and are usually situated at the pylorus, or just pre-pyloric.

They may be primary cancer, or the result of malignant degeneration of old ulcer. The extension of the growth is from the pylorus and is not annular in character. The method to be considered in the Roentgen examination of these cases is extremely important. The Roentgenoscope, while of value in this connection, should by no means be depended upon exclusively. These lesions are so small that their direct detection upon the Roentgenoscopic screen is, in the majority of cases, impossible. The screen study of the indirect manifestations, such as hypermotility, lack of peristalsis, anaperistaltis, etc., while important, does not warrant positive diagnosis, and is apt to lead to many errors. In other words, a diagnosis of carcinoma of the stomach made by the fluorescent screen is usually only inferential and is dangerous. The chief danger is the chance of missing lesions that could be detected by other methods of Roentgen examination. The only safe and exact method of diagnosis is by the direct demonstration of the lesion upon films. The technique in early diagnosis of early cancer of the stomach varies in no essential detail from the routine examination for other gastric lesions. The barium buttermilk is the routine meal. Plates are made at once following the ingestion of the meal. The patient is examined in both the standing and prone positions. If any filling defect is observed films are made with the patient in the lateral position. Repeated or serial films are essential to demonstrate the permanency of any defect. It must always be borne in mind that even one film which shows a normal filling of the stomach carries more weight than twenty others which may show a defect. The Roentgen picture consists of a filling defect in the gastric shadow. This defect in the early case is small and is usually at or near the

pylorus. A small percentage of these primary new growths occur at the cardiac end, being situated usually at the cardiac orifice. Cases in this group are detected first during the study of the oesophagus, obstruction at the cardia being their most common manifestation. Primary carcinoma in the pars media is comparatively rare. These filling defects, when they occur near the pylorus, are annular in character, resembling in the very early cases a greater elongation of the pyloric gap. This annular appearance is the fundamental characteristic which distinguishes these lesions from the ordinary chronic ulcer in this region. Just why these lesions should give this annular defect we are not at present ready to state. It is barely possible that the extension of the cancer cells through the lower layers of the stomach will affect the contractility so as to exaggerate the defect and give the annular appearance. Of course this is only suggestive. The characteristic defect must be seen on a number of films, although not necessarily a large number of plates. It is advisable to confirm the presence of the defect at another stomach examination, usually made after the twenty-four hour film. It is especially important to show the defect in the lateral view of the stomach as this disposes definitely of the problem of pressure from liver, gall-bladder, etc. Next in importance to the annular character of the lesion is the irregular "bitten-out" appearance. This is seen most frequently in the advanced growths, but should be searched for even in the smallest lesions. An annular defect associated with this characteristic irregularity is pathognomonic of new growth. It is very rarely simulated to any extent by chronic ulcer. Of course the problem of malignant degeneration of old ulcer is always present. Whenever this irreg-

ular, annular defect is found radical surgery should be urged, a resection of the lesion if it is surgically possible and not a mere palliative gastroenterostomy. Of course resection will depend upon the mobility of the part, lack of adhesions, absence of liver metastases, glands, etc. No doubt in some cases the possibility of cancer is of less consequence than the added risk of resection. These lesions, whether actually chronic ulcers or not, as far as treatment is concerned, should all be considered actual or potential new growths. With the lesions which give definite Roentgen evidence of malignancy, no surgeon has the moral right to deny his patient the chance of cure that is afforded by resection. The decision of malignancy should not be allowed to rest with the surgeon who has only external inspection and palpation to guide him. The Roentgenologist has, in addition, the evidence from the mucosal side of the stomach. The sole judge of the case should be the pathologist after he has examined the microscopic section from the excised lesion. These observations can be summarized briefly. The best clinicians today are agreed that the early diagnosis of gastric carcinoma is hopeless with clinical methods alone. With the Roentgen method properly applied, we have a means at our disposal that will enable us to detect the cases when they are still amenable to surgery. The lesions are small and located near the pylorus, showing small filling defects, annular in character. With such findings present, the Roentgenologist should urge resection, as only in this way can the problem of gastric cancer be solved. The negative aspect has not been emphasized enough. The negative Roentgen plate is today of as much value in diagnosis as the plate with positive evidence of disease. This negative value depends upon only one impor-

tant factor; that is, the technique. Investigators must adhere to a well-tried technique. With our routine every normal stomach must give a normal Roentgen picture and no normal picture will be obtained if the stomach contains within its walls any organic changes. A normal stomach on the Roentgen plate absolutely rules out any growth beyond the microscopic stage. This is of great practical benefit, for many of our patients come actually suffering from a fear of cancer. A negative gastrointestinal examination cures the sufferer.

The appearance of advanced carcinoma is merely a more extensive and pronounced picture of early carcinoma. The elements are the same. First, the annular deformity may have extended so far that instead of a simple elongation of the pylorus, we now have marked canalization involving a half or two-thirds of the stomach. Second, the irregular outline, with its "bitten-out" appearance, now assumes an appearance of finger-like projections extending into the body of the barium shadow. In extreme cases, the whole stomach may be involved so that the picture shows a rigid tubular canal extending the whole length of the stomach. This canal may vary in diameter from half an inch to two or three inches. In the latter condition, the stomach has been described as a "leather bottle." The walls are absolutely rigid, due to the neoplastic infiltration. The plates show no evidence of peristaltic waves and, under the screen, its shape is not affected by moderate pressure and there is usually an accompanying palpable tumor. The size of the stomach, in such a condition, is usually constant. Its walls are no longer elastic so that there is no yielding of the walls when the patient attempts to eat. The patient can therefore eat only a small amount at a time, even with the very rapid emp-



tying of the stomach which is a characteristic feature. These advanced cases sometimes show an hour-glass deformity. This need not be confused with the hour-glass deformity produced by chronic ulcer. In ulcer, the outline of the constricted portion is smooth and the sulcus usually narrow, while with new growth the sulcus is broad and the outline irregular. Furthermore, the connecting isthmus of the hour-glass deformity in ulcer is displaced to one side. Usually it corresponds to the lesser curvature. The deformity is not symmetrical. With new growth the connecting isthmus is usually central and the hour-glass deformity is quite symmetrical. This deformity in chronic ulcer is due to a contraction of a band of circular muscle fibers, while in new growth it is an annular infiltration of the stomach wall with new tissue. A few cases of early carcinoma will produce early symptoms. This occurs when the lesion is at the pylorus and there is produced early pyloric obstruction. Such patients come to the Roentgenologist early and the examination shows principally a gastric stasis, with more or less deformity about the pylorus. These cases may be confused with obstruction from chronic ulcer. However, the evidence of muscular hypertrophy, gigantic peristalsis, marked enlargement of the stomach, etc., are usually found with chronic ulcer and not with cancer, principally because obstruction from cancer is of shorter duration and these secondary changes have not had time to take place. The history may be of value in helping to differentiate these two conditions, chronic ulcer or new growth.

### Ulcer of the Duodenum

Since the brilliant work of Moynihan, Patterson and William Mayo was accepted by the medical profession, no new evidence in the diagnosis of duo-

denal ulcer that was positive in character was presented until Cole of New York proved the possibility of the direct diagnosis of pathological lesions in the first portion of the duodenum by serial Roentgenography. The diagnosis of duodenal ulcer by the Roentgen ray, especially by the direct method, is one of simplicity. It offers no particular difficulties other than that of care in technique. For convenience and clearness, the whole question depends upon the following propositions, which are substantially based upon the work of Cole and his observations, which have stood the test better than all other methods. First, the direct method consists in demonstrating adequately the anatomical condition of the first portion of the duodenum. This is opposed to the conception of the symptom-complex, which emphasizes only inferential evidence and is not conclusive as compared with the direct method where we actually demonstrate the lesion. Second, ninety-five per cent of all duodenal ulcers occur in the first portion of the duodenum. Third, anatomically, the first portion of the duodenum is a constant entity. Fourth, if normal, the first portion of the duodenum can be demonstrated on a plate with characteristic shape and smooth outline. There is no exception to this rule. Apparent exceptions are due to improper technique. Fifth, a constant defect in the duodenal cap means a pathological condition. This may be ulcer, adhesions due to cholecystitis, or anatomical or accidental variations such as pressure from adjacent organs. Sixth, any duodenal ulcer which is more than a simple mucous membrane erosion will deform the outline of the barium mass. To this statement there is no exception. Seventh, a normal "bulbus duodeni," or duodenal cap on the film, rules out chronic indurated or surgical ulcer. There is one excep-



tion to this rule; that is, the minute recent ulcer which perforates without prodromal symptoms. However, we are not obliged to consider this from a Roentgen point of view. In the direct method of examination of duodenal ulcer, we must show the anatomical condition of the first portion of the duodenum on the plate. In the average it is simple, but occasionally the problem of pyloric spasm, pressure from adjacent organs such as a large and distended gall-bladder, enlarged lobes of the liver, spasm due to cholecystitis, pelvic conditions, chronic appendicitis, and obstructive conditions of the large and small bowel may make it more difficult. The size of the individual, the amount of mesenteric fat and general condition of the abdominal cavity, all play an important part in the ease with which the duodenum can be demonstrated on the Roentgen film. There is no set rule as to how this can be accomplished. Films should be made with the patient in the prone position at first, and in the majority of cases the first portion of the duodenum will completely fill with no angulation of the stomach edges of the superior and inferior borders, as well as the pyloric sphincter. Time must be given for the stomach to start emptying. This may vary from the moment of taking the first mouthful to the first hour. In the average case, as soon as the patient has had the meal and is in position on the table, the first portion of the duodenum should be visualized. If we are sure there is no other lesion but the possibility of duodenal ulcer, half the usual meal will show the deformity better than the complete meal. If the duodenum does not fill out completely and we find apparent deformity, by placing the patient right side down on the table with the plate underneath, using a small cylinder, localizing for the average stomach

midway on the costal cartilage, the plate will show the first portion, the beginning of the descending and part of the transverse duodenum in practically the same relations as we see these parts on the films when taken in the prone position. In the difficult cases it may mean ten to fifteen minutes with the patient on the side before the duodenum will fill completely. These are the cases in which the patient is large or spasm is present. As a rule, films should be made at intervals for an hour before passing an opinion of duodenal ulcer on the deformity alone. In showing a normal first portion, effort should be made to carry out the technique over a period of at least an hour. One of the films should show the duodenum completely filled if it is normal. To this there is hardly an exception unless a large liver, new growth of the gall-bladder, or some other factor causes deformity by compression. Occasionally the only way the first portion of the duodenum can be shown is in the upright position. With all mixtures except the buttermilk mixture, it is difficult to fill the duodenum completely in the upright position. This has been one of the great sources of error in the inferential study by the Roentgenoscope. One should not change from the prone to the lateral and to the upright position without an effort being made for a reasonable length of time to get the cap in some one position. But it is only in the exceptional case that the first portion of the duodenum is slow to fill. That the first portion of the duodenum is a constant entity is the criterion of the value of the direct method. The first portion of the duodenum is constant unless there is some pathology of the duodenum itself or of neighboring structures, as of the pylorus, and, whether the duodenum is large or small or average size, its borders

Roentgenographically will always be smooth when normal. If it be admitted that with a series of films, a normal duodenal cap can be shown when it is normal, then the converse of the proposition must be true. It is quite remarkable that practically all the investigators on the Continent did not seem able to reproduce the first portion of the duodenum on the photographic plate, or at least they laid a great stress on the fact that it is difficult to do. It is solely a matter of improper technique, in part due to the kind of meal used. It would seem, then, that only one important question remains; that is, will all ulcers of the duodenum show on the Roentgen plate? Dr. William Mayo published a pathological study of a number of cases of ulcers excised from the anterior wall of the first portion of the duodenum (*Annals of Surgery*, 1913, lvii, p. 691) that seemed to have a different character from the classical gastric ulcers, which show a relatively broad, punched-out, callous defect in the mucosa with excessive induration. These duodenal ulcers often showed merely a pinpoint defect on the mucosal surface with some mucous membrane heaped about them. If proper technique is used, in a majority of the cases such a mucosal defect will show. It should be remembered that in this type of ulcer the amount of callus in the submucosal, muscular and peritoneal coats bears absolutely no relation to the minute size of the ulcer itself, which probably accounts for the Roentgenographic appearance of these ulcers, which seems exaggerated when compared with the operative findings. In no other part of the gastrointestinal tract is the deforming effect produced by connective tissue upon the barium mass so apparent as in the first portion of the duodenum. The Roentgenologist knows that the amount of deformity shown on the

film taken when the barium is passing through the duodenum may seem to belie the appearance of the duodenum as presented at operation. A certain percentage of cases show on the Roentgen film, opposite the ulcer, an incisura partly in character, but mostly due to the involvement of the deep muscle layers by connective tissue or cicatrix. If a film could be obtained in every case while the descending portion of the duodenum were held to one side so that it would not underlie the view obtained of the first portion of the duodenum, then the incisura would be more apparent than it is in the majority of cases. The problem of whether an ulcer can exist as a simple erosion is academic. Such an ulcer would be unlikely to give any symptoms and hence is of no immediate interest to the clinician or to the Roentgenologist. The pitfall for the novice in the Roentgen study of the duodenum is the differentiation of the deformity due to ulcer from that due to adhesions. Differentiation can be made readily between simple adhesions and ulcer of the duodenum. But where we find a combination of ulcer of the duodenum and adhesions, we cannot say always, nor is it necessary, whether these adhesions are due to the ulcer, or to gall-bladder disease, or to both. It is sufficient to pass the opinion, which we can do from the Roentgen films, that there is a surgical lesion. In simple adhesions, no matter how extensive, the deformity of the barium mass is greater at the beginning of the examination, gradually lessening as the stomach empties, and while the stomach when first filled will be found in the subhepatic region, it will be found in successive plates to move back to the median line as it empties. When the degree of deformity remains the same from the beginning of the examination until the stomach has almost emptied itself, it

is more characteristic of ulcer. A constant deformity of the duodenum is peculiar to ulcer and to no other lesion. That a normal first portion of the duodenum rules out indurated or surgical ulcer, increases many times the negative value of a Roentgen diagnosis by serial films. Whenever we demonstrate the first portion of the duodenum to be free from deformity, we may pass a negative opinion. Much of the usefulness of the Roentgen method lies in this negative aspect. Negative evidence, however, is of greater value as referred to the duodenum than to the stomach. We find, then, that the Roentgen diagnosis of duodenal ulcer by the direct method, basically rests upon the demonstration by serial Roentgen films of the continuity of the first portion of the duodenum, or the demonstration of a constant defect in its contour. There is no better argument for the direct method than that this can be accomplished so unfailingly. The indirect method, as employed by Dr. R. E. Carman of the Mayo clinic, demands careful review, because the large number of cases examined by that method under his direction give credence to the accuracy of the data drawn therefrom. He has divided the Roentgen signs of duodenal ulcer into major and minor groups. The major signs consist of "hyperperistalsis, six-hour gastric residue and demonstrable diverticulum of the duodenum." Gastric hyperperistalsis has been emphasized more than any other sign. The writers have stated, "abnormally marked peristalsis is an important sign if found." The difficulty is that even with Carman's large series it was present in only fifty-seven per cent of the proved cases of duodenal ulcer. It was found in pyloric stenosis due to other causes than ulcer, as early carcinoma and abnormal nervous conditions. We have seen violent hyperperistalsis in individ-

uals with no organic disease present. Its presence is hardly more than suggestive and its absence certainly does not warrant a negative diagnosis. It is a very treacherous basis upon which to find a diagnosis of duodenal ulcers. Six-hour barium residue in the stomach depends to a large degree, as has been already stated, upon the character of the meal used. The large number of Roentgen examinations made by Carman justifies him, no doubt, in attaching a definite significance to the presence of a six-hour stasis with his particular meal and technique. He found this residue, however, in only 33.3 per cent of his cases of duodenal ulcer. This corresponds fairly well with the observations of other investigators. Indeed, Holzknecht and Haudek found a residue in only twenty per cent of their duodenal ulcers. Thus it would seem that at the very best, about two-thirds of duodenal ulcers give no positive information as to this major diagnostic sign. A diverticulum of the duodenum, so-called, is undoubtedly important when present. Carman found it in only two cases out of one hundred and ninety-eight. George and Leonard have seen this condition in about six cases. Its rarity militates against its effectiveness as a constant factor in diagnosis. Incidentally, this diverticulum is probably not due to a penetrating duodenal ulcer in the sense that "Haudek's niche" is produced by a penetrating gastric ulcer. Such a penetration is extremely rare in duodenal ulcer and only two cases have been noted. These diverticula are probably caused by a pull of adhesions for a considerable length of time which finally results in the production of small sacculations.

Sometimes, also, such sacculations may be the result of a cicatrizing process which involves all the duodenal cap except one small section in which the wall is normal and which contains

a barium residue. In respect to these so-called "major signs," the one sign which is considered most valuable, gastric hyperperistalsis, leaves us without help in at least forty-three per cent of cases. The combination of hyperperistalsis and six-hour gastric residue was found in only 24.7 per cent of his cases, yet Carman states they are "worth more than 95 per cent in the diagnosis of duodenal ulcer." This, on the face of it, seems hardly compatible with his statistics. Again he states that "the combination of hyperperistalsis and six-hour residue or diverticulum, when found in an otherwise normal stomach, constitutes about the only evidence on which a purely radiologic diagnosis of duodenal ulcer may safely be advanced." If this is true, then in at least 75 per cent of cases a purely Roentgen diagnosis is impossible. The results of the direct method certainly do not support this statement. As a matter of practice, these so-called major signs are not dependable and, as a matter of deduction, Carman's own statistics are open only to the same conclusion. Let us examine what he calls "minor signs" in Roentgen diagnosis and accord at once with him as to their relatively inferior value in all but one instance, which we shall consider last. Hypermotility of the stomach is a sign which we agree is by no means pathognomonic of ulcer, since it occurs in achylia gastrica, carcinoma, and motor neuroses. In duodenal ulcer the presence of hypermotility results from a physiological tendency towards rapid emptying of the stomach due to duodenal irritation on one hand and the mechanical obstruction from the cicatrized portion of the duodenum on the other. The results are so variable that they offer no basis for definite conclusions to be applied to any particular case. Hypertonus of stomach, the presence of pressure tender-points

and the lagging of barium or bismuth in the duodenum, we are agreed are minor signs in the Roentgen diagnosis of duodenal ulcer and no one of them is pathognomonic. Reliance on these signs is certain to lead to errors of diagnosis. When, however, we consider the last of Carman's minor signs, namely, deformity of the outline of the duodenal cap, we must emphatically protest against including this among the minor signs. The word "irregularity" does not convey sufficiently the idea as to just what we are attempting to demonstrate by the direct study of these cases. What we try to show in every instance is either a normal duodenum or the exact size, extent and character of the lesion. The entire problem revolves about the method of study of the duodenum. In the application of the Roentgen ray to surgery generally, the development has always been along the lines of attempting to obtain positive data and eliminating all bases for diagnosis that are uncertain and indefinite. This trend is seen already in the Roentgen study of fractures, bone disease, and renal calculi. The same point of view is equally true when applied to duodenal ulcer. The only basis for a definite opinion should be the actual demonstration of a normal or abnormal duodenum. The direct school of diagnosis disregards all the indirect, so-called "major" or "minor" signs, and restricts itself to one problem; namely, the attempt to demonstrate adequately the anatomical condition of the duodenum and he determination as to whether the duodenum so demonstrated is normal or pathological. This problem is largely one of careful and exact technique. The Roentgenoscopic method, when applied to the body of the duodenal ulcer from this point of view, is entirely unsatisfactory. It is true that sometimes the duodenum can be seen in its entirety, but it can



never be seen for a long enough time to satisfy one as to its anatomical completeness. It certainly cannot be shown in all cases, especially in well-nourished individuals. In the standing position in which the Roentgenoscope is ordinarily used, this demonstration is usually impossible. All that can be shown is the pressure of the bismuth into the cap, which is speedily emptied. It is only with the plate method, carefully carried out, that the duodenum can be demonstrated in its entirety. We do not mean to infer that the Roentgenoscopic study of the gastrointestinal tract is worthless. The Roentgenoscope has undoubtedly its valuable applications in the study of the stomach and many other parts of the alimentary tract. However, when it comes to the study of the duodenum and the problems involved in duodenal ulcer, the Roentgenoscope must be considered as of minor value. Serial Roentgen films are ideal in studying these cases and it is not necessary always to take an extremely large number of them. Only enough films need be taken to convince the investigator of either the normal condition of the duodenum or its constant abnormal condition. There is no set rule as to the position of the patient during the examination. All the positions, prone, standing and lateral, may have to be used in order to obtain the desired information. The exact procedure to be followed must be worked out in each individual case as the problems present themselves. This requires the use of rapid developers and the development of plates during the progress of the examination. Of course, this is a more troublesome process than the indirect method, but the more accurate results obtained are certainly worth the bit of extra labor and expense.

### Gall-Bladder

We are now able to secure radiographs of gallstones in something over 90 per cent of cases. The great advance in this regard may be appreciated by a comparison with a few years ago, when Roentgenologists were delighted with their ability to show gallstones in one-half of the cases. At the present time, in some 10 per cent of cases of gallstones we obtain shadows of the stones that we are not able to differentiate from shadows that are sometimes present in cases free from stones. This possible source of error we have not yet been able to eliminate, but it is far less than the margin of error in any other method of non-operative diagnosis of gallstones. In quite a small percentage of cases, the gallstone shadows are masked by the shadows of other densities, such as those of old adhesions. On the other hand, in a large per cent of cases, the radiographs of gallstones are so distinct as to make the diagnosis absolute. No surgeon worthy the name would think of operating for gallstones on a presumptive diagnosis without granting his patient all possible benefit that may be secured from an examination by a competent Roentgenologist. A similar attitude should be taken by medical men. It is not fair to the patient to carry on prolonged observation and treatment of a possible case of gallstones without such an examination.

Identification of the gall-bladder aids materially in the detection of calculi, and is a detail which one should always try to obtain. It can be detected in nearly every case where it exists normal in size or dilated. The gall-bladder may be found anywhere from the region of the eleventh rib to the fifth lumbar vertebra, and possibly as far down as the sacrum. As



a rule, it will be seen below the lower border of the liver. If, after taking a number of Roentgen plates, the gall-bladder is not found in the normal position, it can sometimes be located when a subsequent bismuth examination is made by noting the position of the transverse colon.

Gallstones are divided into two definite groups: (1) Stones which contain considerable calcium, and (2) cholesterine stones which contain no calcium, or only a trace of it. Gallstones containing a large proportion of calcium can be shown without much difficulty and are sometimes so dense as to be mistaken for renal calculi. The dense calcareous gallstones are a type of calculi infrequently found; this perhaps explains why the study of gallstones made slow advance since they were first observed. By far the greater number of gallstones consist of a cholesterine nucleus, with a calcareous coating, or vice versa. When the peripheral concretions are thin, which is true in about 50 per cent of the cases, the stones are difficult to detect. With increasing density of the coating, the ring-like appearance is proportionally more marked and relatively easier to discover. The absolutely pure cholesterine stone is a rare entity. Unless unusual care is used in making and interpreting Roentgen films, cholesterine stones containing only a trace of calcium will be entirely overlooked in the future, just as they have escaped observation in the past. It is not the shadow-producing quality of the stone as a whole that concerns us in this class of case, but rather the shadow cast by the long diameter of the periphery of the stone. Whether the stone be faceted, spherical or a combination of both, in some particular diameter there will be sufficient density to cast a peripheral shadow. This explains in part why a single Roentgen film of a series will often

reveal a perfectly characteristic gallstone, whereas all previous films of the same region show only questionable shadows. If each individual stone in a mass of small stones does not cast a well-defined shadow, the shadow of the entire mass will often give the clue. The interpretation of suggestive shadows in the region of the gall-bladder is fraught with difficulties, similar to those experienced when positive diagnosis of kidney stones was first attempted. The present accuracy in diagnosing renal stones is the result of experience gained through numerous examinations. Some of the disturbing factors in the gall-bladder region are intestinal contents, calcified mesenteric glands, costo-chondral ossification, and stone in the kidney and liver. Recent experience has added to our knowledge of possible pitfalls. Food in the first portion of the duodenum is a particularly confusing finding, because its density corresponds to the faint shadow of some stones, and its size and position add to the illusion. Upon minute examination, however, it will be found that the shadow of food lacks the ring-like circumference of the cholesterine stone with a calcareous shell; neither has it the homogeneous character of the calcium stone, but is rather mottled in appearance. Moreover, it is usually possible to completely identify the shadow by tracing the outlines of the adjoining pars pylorica. A disturbing element of the same character is food contained in a single haustrum of the colon at the hepatic flexure. Being broad at one end and tapering to a fine point at the other end, it resembles an almond-shaped calculus. A physic and abstinence from food eliminates this error. Another interesting finding, and one which is visible only to the eye trained to pick up the slightest variation in density, is the presence of little rings, often no

larger than a good-sized pinhead, sometimes found in groups, sometimes isolated, in varying shapes of round, oval or even quite irregular form. It is quite possible that these infinitesimal findings are the walls of blood vessels seen in cross section. It is a mistake to study Roentgen films when they are wet, not only because reflected light cannot be avoided, but also because there is risk of damaging the film. A careful study of the clinical history of cases in which gall-stones are definitely shown by Roentgen methods reveals the futility of expecting the classical gall-bladder symptoms to agree with the Roentgen diagnosis. Before the advent of the X-ray, renal colic and renal calculi were considered almost synonymous terms. But surgical procedure for renal colic in cases where calculus was shown on the Roentgen film eventually proved that only about one-fourth of the cases having typical attacks of renal colic had a calculus of sufficient size to be found by surgical exploration. On the other hand, only about one-fourth of the cases in which kidney stones were definitely demonstrated by Roentgen methods had anything simulating renal colic. Our present experience indicates that the observation will hold true in the gall-bladder region, that only when a gall-stone passes or engages does it cause the typical gallstone colic, and this is relatively rare as compared with the frequency of gallstones. The clinical indications of cholecystitis compare with those of pyelitis, except that one does not detect the presence of pus in the stools as readily as one detects it in the urine. Some of the cases of gallstones give practically no characteristic symptoms of gallstones, but are associated with obscure gastric or neuritic symptoms. Therefore, any case presenting gastrointestinal symptoms with absence of Roentgen

evidence of an organic lesion of the stomach or intestines should be submitted to a careful Roentgen examination of the gall-bladder. This is particularly true if, as Deaver suggests, the patient is "fair, fat and forty and belches gas." It is much easier to detect the stone in this class of case than in thin, wiry, poorly nourished people who have no fat to outline the gall-bladder, and whose muscle is nearly as dense as bone. In persons under twenty-five, the peripheral coating of the stone is not usually dense, and the stone is so soft that it does not show even a dim peripheral ring or edge. Post-operative cases with extensive adhesions, carcinoma of the liver or gall-bladder, and ascites also render negative diagnosis exceedingly difficult if not impossible. Diagnostic accuracy is directly in proportion to the care exercised in making the examination, and one's experience in detecting and interpreting the findings. Statistics are of little value until thousands of cases have been observed by methods as careful and detailed as those described above. By that time the value of the method will be generally acknowledged, and statistics will not count for any more than they do now in cases of renal calculi or fractures. The Roentgen method of diagnosing gall-stones has become so accurate that if there is no direct Roentgen evidence of gall-stones, or indirect evidence of adhesions involving the stomach, cap, duodenum or colon as a result of cholecystitis, the surgeon should have a full preponderance of clinical evidence as a warrant in operating for gall-stones.

### Resume

1. Until within recent years, gall-stones were rarely detected by Roentgen rays.
2. At present, Roentgenologists believe that they can detect gall-stones

in from fifty to over ninety per cent of the cases examined. This has been estimated in different ways by different men.

3. Experience has shown that gall-stones may be detected about twice as frequently as formerly by: (a) A special technique for making the Roentgen films; (b) a minutely careful study of the Roentgen films by various methods; (c) a thorough intimacy with the Roentgenographic appearance of gall-stones.

4. By applying the new method of interpretation, gall-stones have been detected on many Roentgen plates made by the old technique and formerly diagnosed as negative.

5. By means of the special technique for making and interpreting Roentgen films, a positive diagnosis may be made in so many cases that the negative diagnosis has become of considerable significance.

6. Much care and study will be necessary to properly interpret the additional detail which can be obtained by the special technique and undoubtedly some erroneous diagnoses will be made. (Cole has made two such erroneous diagnoses, and has thereby learned to differentiate the food in the cap and the feces in the haustra of the colon from evidence of calculi, a most difficult problem.)

7. If there is no direct Roentgen evidence of gall-stones, the stomach, cap, duodenum and colon should be examined for adhesions from accompanying cholecystitis.

8. If there is no direct or indirect Roentgen evidence of gall-stones, the clinical history should be more characteristic than usual before one resorts to surgical procedure.

### The Small Intestine

In the study of the small intestine our attention is given to the diseases of the jejunum and ileum. The first

portion of the duodenum, functionally and anatomically, is so closely related to the stomach that, for convenience, we may consider it a part of the stomach rather than a part of the small intestine. The passage of the barium through the normal small intestine is rapid. The speed depends upon the degree of intestinal activity. There is almost continual motion among the intestinal coils, so that our exposure must be less than half a second to obviate blurring. Throughout the jejunum we find the barium in finely divided particles producing a feathery or lace-like appearance. In a general way we can recognize the coils of intestine, but no information concerning the finer structure of the lining membrane can be learned. In the second and third portions of the duodenum, however, we are usually able to distinguish the individual valvulae. In the ileum we find the bismuth particles collecting together into small, discrete masses. In the terminal ileum, unless the emptying is too rapid, we find the coils completely filled with a homogeneous dense barium mass. The important problems which one encounters in the study of the small bowel are: first, malposition, which may be congenital or acquired; second, functional diseases; third, organic disease, including ulcer, new growth and adhesions. The small intestine may be subject to ptosis when a general visceroptosis is present. This condition is not common and has no particular clinical significance. The Roentgen film simply shows coils of ileum low down in the pelvis. Occasionally in hernial sacs, inguinal, umbilical or post-operative coils of intestine can be detected. This has some diagnostic value where surgical treatment is being considered. Valuable evidence is given us in the characteristic displacement of the small intestine by

intra-abdominal tumors. Enlarged spleen, hypernephroma and other kidney enlargements, aneurism of the aorta, and tumors of the pelvic organs are some common causes of displacement. Pregnancy, with the enlargement of the uterus, and sometimes a dilated bladder in diabetic or prostatic cases, will be easily visualized. Large masses of mesenteric glands may displace various portions of the bowel. Functional disturbances of the small intestine show no characteristic Roentgen appearance. The terminal ileum has been a great field during the past few years. One cannot be interested in this part of the alimentary tract without studying the results of the investigations of Lane, Jordan, Case, Bambridge and others. In well nourished individuals the ileum will be well emptied in six to eight hours. On the other hand, poorly nourished persons, past middle age, commonly show a certain amount of ptosis and stasis in the ileum. This is probably in most cases not pathological. In the six-hour examination there may be a marked accumulation of barium in the ileum, with the colon entirely empty. This accumulation of fluid contents without evidence of any discharge through the ileocaecal valve is more suggestive of pathology in the small bowel than the presence of one loop that shows the so-called "Lane's hook." To be safely classified as stasis, barium should be present in the ileum from fifteen to twenty-four hours or more. In the presence of such a marked ileal stasis alone, we still cannot safely make a diagnosis of mechanical obstruction about the terminal ileum. Marked ileal stasis may be present in cases in which, at operation, no demonstrable lesion is found. At times we can show the terminal ileum dilated and adherent and associated with definite fluid stasis. The diagnosis is of value in demonstrat-

ing the presence of adhesions. Ulcer of the jejunum is rarely diagnosed from the Roentgen film, though Carmen claims that a definite percentage of these cases can be diagnosed by the Roentgen method. These ulcers occur usually after gastroenterostomy. The Roentgen evidence of new growth depends largely on the presence of obstruction. This obstruction must be nearly complete. The typical Roentgen film of new growth of the small intestine shows a stasis proximal to some definite point in the intestine, associated with more or less dilatation of the proximal portion of the intestine. This dilatation may be so extensive that the shadow of the small intestine may be confused with that of the colon. In such a case, however, the differentiation depends on the characteristic shadow cast by the valvulae of the small intestine. Adhesions by obstructing the lumen may give an appearance resembling that of new growth. The fact that obstruction from adhesions usually occur in the right lower quadrant is sometimes of value in making a diagnosis, especially where there is a history of previous appendix operation or old pelvic inflammation.

### Appendix

The Roentgen investigation of the appendix has been distinctly an American contribution. The faulty technique of the Continental school is acknowledged by European Roentgenologists. Schwartz, for his work on the gastro-intestinal tract, sent to Case for the use of several plates showing appendices. Their fundamental difficulty seems to lie in the character of the opaque meal. (The cereal mixtures, for one reason or another, do not readily enter the appendix.) With the meal of buttermilk and barium, in every instance, unless the lumen has been obliterated, the appen-



dix will fill and it will remain so long enough to be demonstrated on the Roentgen film or by the Roentgenoscope. Failure of the appendix to fill with the barium buttermilk is usually indicative of an obliterative appendicitis. The normal appendix fills and empties within a reasonable time. The retention of barium buttermilk residue in the appendix after emptying of the colon is pathological.

### Technique

The technique is comparatively simple. The character of the opaque meal is the all-important factor. Ninety grammes of barium in a pint of buttermilk is the meal which will allow the appendix to be satisfactorily visualized. In a hospital where a malted milk meal is used, the technique otherwise being identical with this, out of three hundred routine examinations, the appendix was visualized in less than thirty. We are ignorant of the reason for this. It has been suggested that the fermented milk reaches the caecum in a more fluid state than the other media. Then again its acid reaction, or possibly even the presence of the lactic acid bacilli, may have some bearing on the matter. Whatever the mechanical or physiological reason, we know empirically from our experience that the buttermilk meal is of fundamental importance for visualizing the appendix. Occasionally the lumen of the appendix may be filled by the enema method. Secondly, let us call attention to the necessity of careful film work. The Roentgenoscope, to be sure, has a place in the study of the appendix. But, as a matter of fact, the appendix shadow in not a few cases is thread-like and oftentimes but a series of three or four dots, so that its study becomes a matter of fine detail. For the visualization of detail, films are essential. Case first emphasized the

importance of the patient's position in his work, laying great stress on the advantage of the horizontal position. Films are made both from the front and back. The upright position may occasionally bring the appendix to view when others fail. In a few cases a retrocaecal appendix may be shown by means of the lateral view. In this position the posterior surface of the caecum is shown in profile. The patient lies with his right side on the plate. He then rotates in a longitudinal axis, so that the plane of the abdominal wall forms an angle of about sixty-seven degrees with the plate. The tube is perpendicular to the plate and centered over the caecum. A retrocaecal appendix may also be shown by waiting until the caecum is partially evacuated, twenty-four to thirty-six hours after the meal, when the appendix can be seen through the shadow of the caecum. If one fails to locate the appendix thus, the screen may be of aid. Manipulation may be necessary to bring the appendix to view if hidden behind the caecum or coils of ileum. These can be held or pushed to one side with gloved hand or "wooden spoon." Once having located the appendix, then plates can be made. The screen, associated with palpation, furthermore can give evidence of adhesions and the possible relation of any tender-point to the appendix. The six and twenty-four hour plates are the ones most likely to show the appendix. The appendix probably begins to fill shortly after the meal enters the caecum. However, the twenty-four hour film usually shows the appendix best, for in the earlier plate coils of bismuth-filled ileum tend to cover it over. Later films should be made to determine the length of time which the appendix retains the opaque salt.



### Pathological Appendices

In order to recognize the pathological appendix we must first familiarize ourselves with its normal appearance. The appendix is made visible by the meal in its lumen or by fecal concretions which it may contain. The concretions may be mistaken for calculi in the ureter. The filled appendix appears on the Roentgenogram as a linear shadow apparently projecting from the inner edge of the caecum. The distal end floats free in the abdominal cavity. It may lie vertically behind the caecum, or horizontally along the pelvic brim, or hang over the pelvic brim into the pelvis. It may be high in the abdominal cavity, even above the iliac crest, or low in the pelvis, depending on the position of the caecum. It is freely movable under palpation. It varies in length from an inch or less, up to eight or nine inches. Its width ranges from a quarter of an inch to the diameter of a thread. It may be perfectly straight, curved, or obtusely angulated.

The appendix usually shows as a dense homogeneous shadow. It frequently appears segmented as a series of dots or dashes. This appearance may be produced by contractions of circular muscle fibers in the appendix wall.

It is to be remembered that the normal appendix may intermittently fill and empty. When the first film is made the appendix may be empty, but another film made five minutes later will find it full. This is particularly true in children. The normal appendix does not retain barium or bismuth for any longer time than does the caecum.

One source of error is to confuse a small residue in the terminal ileum with the appendix shadow. The pathological appendix may be acute or chronic. In acute appendicitis, the Roentgen ray is of little diagnostic

value and fortunately the clinical picture is usually definite enough. In some cases of acute, left-sided pain, transposed viscera may be shown by an opaque enema, or if there is time, the appendix itself can be shown by the usual meal. In these cases, the barium enema is sometimes of value.

Chronic appendicitis may be shown by:

1. Absence of the appendix shadow.
2. Abnormal conditions of position, shape, and size of the lumen.
3. Concretions.
4. Tender-points.
5. Adhesions.

To repeat, every normal appendix will show on the film. Without history of appendectomy, an absence of the appendix shadow means either that its lumen has at least been partially obliterated by old inflammation, or is obstructed by a possible kink, or it may be so filled with mucus or concretions that the barium cannot enter. It is conceivable that an acute inflammation could so congest the walls that the lumen would be obliterated. In any case the appendix is pathological. This is all the more certain if, with the Roentgenoscope, tenderness is elicited over the appendix area. A retrocaecal appendix should be regarded with suspicion. A normal appendix may occupy this position, but it will be freely movable. A retrocaecal appendix that is fixed is nine times out of ten pathological. The size of the appendix is of no special pathological significance. Very rarely dilatation can be demonstrated, either of the whole appendix or of the tip. This means at some point there is obstruction which prevents emptying. This condition is more or less characteristic of acute appendicitis. Variations in shape may be caused by concretions, kinks and adhesions. Some of the curves seen at times give almost the appearance of knots. All

these conditions are abnormal. The presence of concretions is certainly pathological. Concretions, because of their density, may show independently of the opaque meal. They may be mistaken for calcified tubercular glands, phleboliths or ureteral calculi. In the filled appendix they cause definite defects. They are small circular vacuoles within the appendix shadow.

Palpation with the Roentgenoscope may reveal tenderness over the appendix. When found, this phenomenon is quite pathognomonic of appendicitis. Stasis in the appendix at least suggests possible future trouble. Barium is sometimes retained in the appendix a week after the whole colon has been emptied. Case reports a case where the appendix still retained bismuth on the twentieth day. Pirie mentions a case where bismuth was present on the forty-third day. This condition of stasis means that the appendix drains itself poorly. This is a fertile field for the formation of fecaliths with sooner or later a definite appendicitis.

Evidence of adhesions may be shown by the Roentgenoscope or by serial films made with the patient in several positions. Adhesions involving the appendix itself tend to hold it in a fixed position. The demonstration of permanent fixation between the appendix and some other organ or the abdominal wall is of pathological significance. Such a condition is best shown by palpation under the screen. The appendix may be retrocaecal and adherent to the caecum or bound down to the posterior wall. The appendix may be fixed about a loop of terminal ileum or even to a portion of a redundant sigmoid. Occasionally the appendix will be held in the pelvis by pelvic inflammation. Adhesions may deform the appendix itself, as will be shown by permanent kinking. Frequently a kink will show better with the patient

in the upright position. Adhesions about the caecum, ascending colon, and ileum, often bear a casual relation to appendicitis.

### Large Intestine

In the study of the colon, the Roentgen ray is of diagnostic value in the following conditions: First, abnormalities in motility; second, new growth; third, adhesions; fourth, congenital or acquired malformation or malposition; fifth, colitis; sixth, diverticulitis. In the usual routine the "six-hour" and "twenty-four" films give us the best visualization of the colon. In the six-hour film we normally find the head of the barium column at the splenic flexure, while the tail is at the lower end of the ileum. In the twenty-four hour film the colon should be fairly well emptied, or at least only the transverse and the descending colon filled. To these limits there is a wide normal variation.

For diagnosis, particularly of new growth and other organic colon diseases, the best Roentgen evidence is obtained from the enema-filled colon. It may be added that no gastrointestinal examination is complete without the opaque enema.

Just a word as to the medium for the enema and the manner in which it is given. Six ounces of barium sulphate in a pint of buttermilk, with the addition of enough warm water to make a quart, proves a very satisfactory medium. It is cheap, easily prepared and in no way disagreeable to the patient. The patient lies on the left side (unless a Roentgenoscopic examination is to be made at the same time) and a soft rectal tube is inserted about two inches. The mixture is allowed to flow in by gravity. The enema is given very slowly and the flow interrupted frequently. This is important for the comfort of the patient.

### Normal Appearance

Let us briefly review the normal appearance of the large intestine. The caecum is that portion of the colon into which the ileum empties through the ileocaecal valve. It is almost surrounded by peritoneum and is, therefore, freely movable. It may be found in the pelvis or displaced upwards. The ascending colon extends upwards and backwards and reaches nearly to the liver, where it forms a more or less acute angle. The hepatic flexure, together with the proximal portion of the transverse colon, may frequently be ptosed, drawn forwards and downwards, which is apparently a normal condition for many people. The transverse colon extends from the hepatic flexure to the splenic flexure. It varies greatly in position. Particularly in thin individuals it may hang as a loop reaching into the pelvis. In this position the distal portion may appear to overlie the descending colon. The Roentgenoscope and stereoscopic films are useful for differentiation in such a condition. The close relation between the transverse colon and the greater curvature of the stomach should be borne in mind. The splenic flexure is firmly held to the diaphragm by the strong ilocolic ligament. This flexure normally occupies a position several inches higher than the hepatic flexure. The descending colon extends from the splenic flexure to the brim of the pelvis. This portion of the colon is practically retroperitoneal and is fixed. The sigmoid has a great normal variation in size and position, as it is attached by a mesentery which varies in length. The rectum extends from the external sphincter to the sigmoid. It is the most distensible portion of the colon and consequently has a great normal variation in size and shape.

### Chronic Constipation

Chronic constipation is a condition which frequently requires a Roentgen investigation. In the cases which are not due to some definite obstruction, there are two general classes: First, those showing atony of the colon, where we find the colon markedly distended, usually filled with gas, and a lack of definite peristalsis; the second group presents a spastic condition in the colon. Here we find marked peristaltic contractions. The barium is divided into small masses, by spasm of the circular fibers. This is noted particularly in the descending colon. Both groups may or may not be associated with ptosis. Instead of the twenty-four hour films showing the colon fairly well emptied, a forty-eight hour or even a ninety-six hour examination may still show the barium in the colon.

### New Growth

New growth of the colon appears on the plate as a permanent filling defect in the colon shadow. The presence of a lesion may first be suspected during the course of the opaque meal and it is usually the twenty-four hour film which gives the hint. Here we find the barium being held at some definite point in the colon. There may be proximal dilatation, depending on the severity of the lesion. Along with this stasis there may be a definite defect in the colon outline, usually of an annular or funnel shape. In the last stages where there is obstruction, the barium meal gives us valuable evidence. The early cases, without obstruction, are demonstrated best with the barium enema. Frequently it has been observed that a growth will offer no obstruction to the meal, but does obstruct the passage of the enema. Schwartz has explained this by the theory that the tumor has already adapted itself from the earliest stages to the pressure of the stools

from above, and that its funnel is shaped by the natural direction of the stools. On the other hand, the enema, which approaches suddenly from below, does not find the way prepared for this abnormal direction, and real obstruction is created. The mechanics is simply that of a valve.

The filling defect, as has been mentioned, is usually of an annular nature. However, it may have an irregular, bitten-out appearance. This is particularly true of new growth in the caecum or upper rectum.

### Malformation and Malposition

The Roentgenoscope is of great value in studying the colon. It is important to watch the enema as it flows in. It will be noted that the whole colon fills with barium within a few minutes. The fluid is unirritating and flows easily and without hesitation clear to the ileocaecal valve. In cases of new growth there is a characteristic halting at the point of hindrance. This arrest may be complete or may be overcome in a longer or shorter time, according to the degree of stenosis. The hindrance to the movement of the stream may be out of all proportion to the degree of actual obstruction. The Roentgenoscope is valuable, for by it a palpable tumor may be detected coinciding with the filling defect. However, the tumor will not be a constant finding, particularly if we attempt to make an early diagnosis. We must guard against misinterpretation of filling defects in the colon as seen on the film. Pressure from a normal spine may produce a suspicious appearance in the transverse colon. There may be a hiatus in the colon due to normal peristaltic movement. One of the confusing appearances is due to multiple diverticulae.

### Adhesions

We may have a band constricting

some portion of the colon. This will produce a filling defect with proximal stasis if the obstruction is severe enough. This appearance may stimulate new growth. The history may help in differentiation. With adhesions we may find more or less displacement of the viscera associated with the filling defect. This is not characteristic of the defects from new growth.

The most frequent location for adhesions to occur is in the hepatic flexure area. Here we often find the ascending colon and the proximal transverse colon adherent, producing sharp angulation of the hepatic flexure. This condition may be accompanied by more or less stasis in the caecum and ascending colon. The Roentgenoscope is valuable in determining the degree of fixation. This condition has been described as the "double-barrel shotgun" appearance. These adhesions may be secondary to old gall-bladder trouble, or possibly a congenital condition, as a so-called "Jackson's membrane." The appendix region is also a favorite location for trouble from adhesions. Post-operative adhesions from pelvic operations in women will frequently displace or distort the colon. The sigmoid is often found fixed, sometimes held over to the right and actually overlying the appendix. It is sometimes held down in the pelvis. The colon may be displaced by other organs. An enlarged spleen will displace the splenic flexure downwards. Likewise an enlarged liver or even gall-bladder will give the hepatic flexure a low position. Various large tumors and masses, such as hydronephrosis, ovarian cysts or even large fibroids, will cause an abnormal position of the colon. There are rare congenital conditions of the colon which the Roentgen ray may reveal. Transposition of the viscera is



not as uncommon as has been supposed. Redundant sigmoid is sometimes found. These may be enormous, the coils of sigmoid almost equalling in length the rest of the colon. Congenital dilation of the colon, in infants called "Hirschprung's disease," shows a characteristic Roentgen picture.

### Colitis

In colitis the Roentgenogram presents a more or less characteristic appearance. Following the passage of the barium meal, the wall of the colon still appears to retain a coating of barium. It has been supposed that mucus adhering to the wall retains the barium.

### Diverticulitis of the Colon

Multiple diverticulae of the colon are not so uncommon as has been thought. Their recognition has become more frequent through the aid of the Roentgen ray. The number of cases of diverticulitis compared with the cases of colonic new growth is about one to three. The Roentgen picture of multiple diverticulae is rather characteristic. After the passage of the barium meal we may find, in the region of the sigmoid or lower descending colon, numerous discrete, round shadows about the size of a pea. These shadows are due to portions of the barium meal remaining in small sacculations in the gut. Under the Roentgenoscopic screen, these shadows are seen to occur in groups and to bear a constant relation to each other. Manipulation may show the relation of these shadows to the wall of the colon. In some cases there will be found a definite palpable mass in the left lower quadrant, due to a peridiverticulitis with its mass of inflammatory tissue. This appearance may be confused with new growth of the colon, and it may be suggested that there is a casual relation between this

condition and new growth. The important diagnostic factor is the prolonged retention of the barium in the diverticulae. It is not uncommon to find these shadows persisting for four or five days after the barium meal. Case reports one case where the diverticulae retained bismuth on the sixteenth day. The diagnosis may sometimes be made with the barium enema. The patient should be encouraged to retain the enema as long as possible. It is also advisable to have a higher percentage of barium in the solution. The patient should be examined just previous to expelling the solution and thirty to sixty minutes afterwards. This usually insures proper filling of the diverticulae. It will frequently be noted that these patients will not be able to empty the whole colon, usually only the rectum and lower sigmoid. A careful series of films must be made in suspected cases of colonic new growth even though multiple diverticulae be present. Early carcinoma may have its beginning in these areas. Unless extreme care is exercised, one may overlook early new growth. The problem is parallel to the recognition of early gastric cancer beginning on chronic ulcer. A very good rule to observe, in the presence of diverticulae of the bowel, is to consider new growth if there is found a narrowing of the lumen of the bowel at any point.

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## EDITORIAL NOTES

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Dr. John Kutch, of Los Angeles, age, vide the daily press, 80 years, but, according to the A. M. A. Medical Directory, 68, has been jailed on charge of suspicion of murder due to an alleged criminal operation.

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Officers of the army corps may engage in private practice under certain conditions, according to changes just made in the army regulations.

If citizens in the neighborhood of a military post or the residence of a medical officer of the army desire the professional services of the latter, and the attendance of a private practitioner is not conveniently available, the army surgeon may tender the desired service, providing it does not interfere with the proper performance of his official duties.

Establishment of an office for civil practice is prohibited. Private or civil practice by army surgeons in settled communities, the needs of which can be met by civilian practitioners, is restricted to consultation with such civilian practitioners and to emergency medical or surgical work necessary to save life or limb, or to prevent great suffering for which civilian physicians are not immediately available.

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The "Examiner" of May 16 contains the following:

"San Francisco, May 15.—Dr. Harry M. Sherman, famous American surgeon and home specialist, died at 1 o'clock yesterday morning at his residence, 2915 Jackson street.

"Dr. Sherman had been confined to his home for the last two weeks with bronchial trouble, from which he had suffered for many years. It was not until a week ago that his condition was considered serious. The family was summoned to his bedside.

"Not only did Dr. Sherman attain fame as a bone specialist, but he is widely known as the 'children's surgeon.' The greater part of the sixty-eight years of his life has been spent in diagnosing bone cases. He was also a pioneer in the Society of Prevention of Tuberculosis and a regent of the American College of Surgeons."

Thus another of California's eminent surgeons has been called from us.

---

Dr. Walter M. Dickie says: "If there were as little typhoid fever in the rural districts as there is in the large cities health officers would have little to do in the control of this disease. According to a recent report of the American Medical Association, Los Angeles stands among the first rank cities in the United States keeping its typhoid fever death rate low. Included with Los Angeles in this group are New York, Minneapolis, St. Louis, Pittsburgh, Cleveland, Albany, Portland and Denver. The San Francisco death rate is but a little higher than the Los Angeles rate.

"Chicago should have been included in the list with Los Angeles and New York."

---

Dr. Rex Duncan is off for the East to address scientific societies in several cities. He will present a paper, entitled "Uterine Cancer with Observations and Results of Treatment in Three Hundred Cases with Radium," before the section of Gynecology and Abdominal Surgery at the American Medical Association's annual meeting in Boston, June 6. While East he will visit various clinics, returning to Los Angeles about June 15.

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## USE OF MERCUROCHROME IN VAGINAL DISCHARGES\*

BY TITIAN COFFEY, M. D.

Los Angeles, Cal.

Mr. President and Members of the  
Society:

No more annoying condition presents itself to the Gynecologist for treatment than the chronic vaginal discharge of women, of whatever origin. Nearly all women complain of leucorrhea, especially after childbirth, and these unfortunates wander from one physician to another seeking relief, spending their lives tied to a fountain syringe and employing their days using medicated douches.

Tonight I desire to bring up for discussion the ordinary vaginal discharge, not necessarily gonorrheal in origin. This latter is a field unto itself, but in my case reports I shall cite one of this variety.

### Etiology

The average woman unmarried, with perineum intact and who has not been subjected to gonorrheal infection, and whose health is up to standard, is seldom affected with leucor-

rhea. However, frequently we find in the virgin whose general condition is below par, a vaginal discharge more or less irritating to the parts and of discomfort to the patient. Local applications are difficult to make; douches are only of temporary relief, and not until the general health is improved by tonics and exercise will the condition clear up. We now know this condition is always an infection of some sort. Dismissing for the moment the Neisserean infection, probably the large majority are due to the Colon Bacillus, next the Streptococcus, and lastly a series of low grade micro-organism difficult of differentiation or recognition. Nature's protection against such infection, of course, is instant genitalia, close approximation of the anterior and posterior vaginal walls, entrance protected by closed labia, faintly acid vaginal secretion and the bacterial flora that has its natural habitat in the vagina. When these

\*Read before The Los Angeles Obstetrical Society.

relations are disturbed by the introduction of foreign matter into the vagina such as frequent examinations with or without unsterile hands or gloves, unsterile douche points, coitus, septic abortions and the various means used by women to prevent conception, we then have the starting point for the introduction of foreign germ life that may be the beginning of vaginal discharge. It is astonishing to me how many women are in the habit of examining themselves, and how many are in the habit of douching for no apparent reason at all. But the main great factor is the disturbance and damage done the genital tract at the time of childbirth, the bruising, laceration and overstretching of the parts, with subsequent relaxation, leaving a gaping vaginal orifice, with sagging anterior vaginal wall and a lacerated hypertrophied cervix with congested heavy uterus low in the pelvic cavity. Here we have an ideal situation for the development of foreign germ life, and many women date their discomfort from their first childbirth.

The origin of the discharge is of three varieties:

(1) Uterine, dependent upon an old chronic endometritis with or without tubal infection.

(2) Cervical, due to an endo-cervicitis with hypertrophy and superformation of the cervical glands, but most commonly following cervical laceration after childbirth.

(3) Vaginal, either pure and simple or accompanied by one or other or both of the preceding two.

The character of the first two is usually a thick glairy mucous discharge, at times purulent; alkaline in reaction, pouring from the external os, bathing the cervix, tenacious of removal, unless sponged off thoroughly with a saturated sodium bicarbonate

solution. This easily dissolves and removes the mucous and makes local application to cervix or cervical canal easy of accomplishment.

The true vaginal discharge is purulent in acute infections, muco-purulent in the less acute, thinning out to the serous or sero-purulent in the more chronic conditions. In this latter it may be of a thin milky white appearance to the naked eye, is usually very acid in reaction, irritating to the genitalia and microscopically made up of a few pus cells, many indefinite microorganisms, a mass of debris of broken down epithelial cells, etc., with usually the predominating organism that was the original cause of the infection.

This is the variety to which I wish to call your attention tonight, and report a few cases that may be of interest. The treatment of these cases has always been unsatisfactory, and still is, for that matter, and has consisted mainly of medicated douching either with mild soothing lotions or astringents, together with the use of local applications and medicated suppositories and tampons. Many have been cured by these means, some benefited as long as they are under treatment, but a vast majority still wander about, either putting up with it silently, or treating themselves, or going from one physician to another, always accompanied by the inevitable douche bag.

Kelly recommends in chronic obstinate cases, painting out the vagina with nitrate of silver in from 10 to 25% solution, dependent upon the chronicity and character of the discharge. This is done by direct vision, using a Sims Speculum and getting into every fold of the vaginal mucous membrane. The vaginal walls are thus cauterized thoroughly, with the result that after a few days the superficial epithelium sloughs off in shreds



and under soothing douches a new covering membrane appears, healthy in appearance, and thus gets rid of the discharge. I have found this satisfactory in a few selected cases. The theory is correct, to destroy the superficial cells in which the infective organism is embedded.

It goes without saying that first and foremost in effecting a cure, it is of the utmost importance that those suffering from damages following childbirth should be put in first class anatomical condition, in other words, cervical laceration repaired and the necessary perineorrhaphy done, to put the parts in as nearly normal a state as possible, closing gaps as it were.

About a year ago, in looking over some of Hugh Young's reports on the use of mercurochrome 220 in male gonorrheal infections, and at that time having under treatment one, the first case as I shall report presently, I was impressed by his statement of the carrying possibilities of the medicated aniline dye penetrating the tissues, thus destroying the infective organism in the deeper layers of the affected tissues. All our methods heretofore were only superficial, cleansing off the infected surface, except possibly active cauterization with strong silver salts, and in many cases did more harm than good on account of too violent reaction following too strongly medicated douches or local applications that only touched the surface and did not reach the deeper layers.

Hence, my determination to try mercurochrome 220 in a series of cases of vaginal infection and to study results.

### Case Reports

The technic in regard to the use of mercurochrome is as follows:

At first the solution was used in one percent strength, but later as a two and one-half percent solution.

The patient in the Lithotomy position, hips elevated on a small porcelain pan, to tilt the pelvis backward, the external genitalia are cleansed with one to five thousand bichloride solution, the interior of the vagina carefully wiped out with pledgets of sterile cotton, the cervix cleansed with sodium bicarbonate solution if necessary, and then from one to two ounces of mercurochrome is introduced into the vagina with a Luer syringe and a small rubber tube. The patient is instructed to draw the muscles up and hold the solution. This is allowed to remain for fifteen minutes. These applications are made daily for one week, when by this time the discharge has become serous in character, and is comparatively free of micro-organisms. The patient is instructed to take a daily douche of borax solution, one dram to the quart or a one to ten thousand potassium permanganate solution. After the germ life has been destroyed, the discharge usually rapidly clears up under soothing lotions or may be assisted by the application of one or two ichthyol and boroglyceride tampons about twice weekly.

Case No. 1. Mrs. S. R., age 22 years, married eleven months, nullipara, menstrual history negative except she usually comes two or three days in advance, but never goes over time; complains of back ache and vaginal discharge. Internal examination reveals the vagina filled with a thick creamy discharge, reaction very acid. Cervix showed considerable redness and erosion. Uterus small and second degree retro-displacement. No trouble about tubes or ovaries.

Microscopic examination of slides from the cervix showed pus negative and bacteria negative. Vaginal discharge showed staphylococci four plus; colon bacillus, one plus; pus cells, two plus. On July 30th, 1920. she was given an injection of mercuro-



chrome one percent solution, one ounce for five minutes, to be followed by one to ten thousand potassium permanganate douches once daily. She then had a period, and did not have a second injection until August the 10th. Slides taken at this time showed pus cells one plus, staphylococci negative, streptococci a few short chains and a few diplococci of non-specific character. On the 17th, she received a ten minute application of a 2½% solution of mercurochrome. On the 25th there was simply a mucous discharge about the cervix, the vagina being perfectly clean. September 2nd, at the time of last injection, examination slides showed pus cells one plus, staphylococci plus two and a few colon bacilli. The vaginal discharge had practically ceased, and the patient did not report again for further treatment. She communicated about a month ago, however, that she was perfectly well and had no vaginal discharge.

**Case No. 2.** Mrs. F. B. A., age 29, Para 2, both babies spontaneous deliveries; first weighing ten pounds; second, weight not given; no miscarriages. Patient complained of extreme nervousness and leucorrhea. She had had a curettage six months previously which had improved the leucorrhea temporarily, but it had again returned. The patient had been east when the discharge had greatly increased, probably due to travelling. Had an unpleasant odor and was irritating to the parts. Examination revealed relaxed vaginal orifice; perineal floor considerably overstretched; vaginal walls redder than normal, cervix bathed with a thin, creamy purulent discharge, reaction of vagina faintly acid, cervix eroded, showing an old laceration that felt very hard. The uterus was normal in size, well anteflexed, in normal position. Left tube

and ovary, somewhat enlarged and easily palpable. Right tube and ovary apparently O. K. Examination of slides from the cervix showed a few pus cells, epithelium one plus, mucous one plus, bacteria negative; vaginal discharge a few pus cells, epithelial cells, one plus, mucous two plus and bacteria a few bacilli only.

On July 27th, 1920, patient received a vaginal injection of mercurochrome, one percent solution for five minutes. On the 28th, the same injection, and on the 30th, a third injection. The discharge had become serous in character by this time, less irritating, and as the patient returned east I have had no further report from her.

**Case No. 3.** Mrs. J. C., first seen June 14, 1920, age 29, married three months, nullipara, menstrual history negative. Complains of vaginal discharge and sterility. Examination showed the external genitalia normal, the vaginal walls bathed with a purulent discharge. The cervix was small, far back in the pelvis, and the uterus in normal position though farther back in the pelvis than usual. There was no evidence of trouble about the tubes or ovaries. The reaction of the vagina was very acid, and the mucous membrane was redder than usual and bathed with a purulent discharge. External os normal. Cervix reddened like the entire vagina. Slides disclosed a few pus cells and staphylococci with considerable mucous. On June 21st, 1920, an application of ten percent nitrate of silver was made to the vaginal walls, to be followed by potassium permanganate douches one to five thousand. On June 28th, the condition was improved, discharge less, vagina not so red nor congested. Another application of nitrate of silver ten percent was made. The patient then had a period and did not report for treatment until July 26th.

Mercurochrome was then started, and she was given a five minute application of one ounce of one percent solution.

On the 27th, this was repeated. The vaginal surface looked clean but was covered with a reddish precipitate from the solution, and there was some slight discharge at the vulvar orifice. On the 29th, the patient reported much less discharge. Examination showed it to be serous in character, rather white and watery, and only a slight amount. On August 2nd, the patient reported the discharge about cleared up. Examination showed very little moisture at the vulvar orifice. There was a thin whitish discharge in the vagina, slides from which showed pus cells negative and bacteria. No specific organism seen.

The patient then had a period, and on the 12th, or ten days later, reported a return of a purulent discharge. The strength of the mercurochrome was then increased to 2½%, and on the 16th, the discharge had become thinner and was muco-purulent in character. On the 23rd, the discharge had much improved. On the 30th, the discharge was slight, but still purulent in character. The patient did not report for treatment from September 9th to 20th, at which time smears were again taken and the discharge was found to be an acute colon bacillus infection. This was a new development and accounted for the return of the discomfort. She was then put on daily injections for one week, when the discharge rapidly cleared up, becoming gradually serous in character, very thin, watery and much decreased in amount. The mercurochrome injections were then stopped, and the patient used a weak borax douche twice weekly. She reported last month that the discharge had practically ceased and she was not taking any douches.

Case No. 4. Mrs. E. D., first seen November 2nd, 1920, age 28 years, nullipara, periods twenty-eight day intervals, normal in every respect. Complained of vaginal discharge, pain on the right side and occasional painful periods. Ten months previous, she stated, she had had an operation in which she was told by her doctor he had removed a tumor. She said she was in the hospital twenty-four hours and in the operating room only six minutes. She could tell me nothing of the nature of the operation or what was removed. Since this time she had had a vaginal discharge which has necessitated wearing a napkin constantly. The examination showed the external genitalia irritated, bathed with a muco-purulent discharge. The perineum was intact, the vagina redder than normal and covered with the same muco-purulent secretion. The cervix was enlarged, congested and presented what looked like a large polypus about the size of a hazel nut which bled freely. The uterus was normal in size, in proper position. There was no trouble about the tubes or ovaries. Examination of the discharge showed a Neisserian infection. On November 4th, under local anesthesia, we removed a soft, fibrous mass from the interior of the cervix about one inch long and one-half inch wide, first ligating and then cutting off the base. This proved to be a soft, small, ill-generated fibroid. On the sixth of November, the application of mercurochrome was made, using a 2% solution for fifteen minutes. On the eighth this was repeated, when the discharge was considerably less in quantity and much thinner. On the 9th, 10th and 12th the application was repeated, and on this date the condition was much improved, the discharge being thin, milky in character. On the 13th, 16th and 17th, the local condition rapidly improved, and on

this latter date, examination of slides showed a few colon bacilli, staphylococci negative, streptococci negative, gonococci negative. On the 20th, the vagina was clean. Patient reported no discharge for three days. Was expecting a period and told to report after it. On December 2nd the vagina was clean, with no discharge, and the patient was dismissed.

Case No. 5. Mrs. B., first seen October 18, 1920, age 25, Para 2. First pregnancy miscarried at two and one-half months. Second pregnancy, spontaneous delivery of a six-pound female infant. Patient gives history of fairly regular menstruation, flowing four or five days freely. Following her confinement four years ago, she has been annoyed with an irritating discharge which was only kept under control with douches. In June, 1920, it became so annoying that she consulted a physician who did a curettage the following month, but she received no benefit. Examination showed the vaginal walls bathed with muco-purulent discharge. Slides taken from the urethra showed a plus one pus cells, bacteria negative. From the cervix we found pus cells plus three, staphylococci negative, streptococci negative, colon bacillus negative and gonococci negative. Four micro-organisms seen that looked like gonococci but were not distinct nor clear and appeared to be chronic in nature. Mercurochrome 220 in 2½% solution for fifteen minutes was then instilled on October 21st, 22nd, 23rd, 25th and 28th. After the first injection, the condition improved, the discharge being less in quantity by the following day; the appearance was much improved. By the 25th the discharge was very little in amount. On the 28th, the vagina had cleared up nicely, but there was a moderate milky discharge from the chronic endo-cervicitis. The patient had had no period since reporting for

treatment, and we began to suspect pregnancy on account of the fact that the uterus had become enlarged and boggy. Smears taken from the cervix on this date showed the slides to be colored red with the mercurochrome, no pus cells nor bacilli seen, but there were numerous epithelial cells. November 1st, the discharge was slight, milky in character, and the diagnosis of pregnancy was positively established. The patient is free from vaginal discharge at present and expects to be confined June 1st.

Case No. 6. This is a typical case of little or no improvement until the use of the mercurochrome, a condition unsatisfactory both to the physician and the patient. This patient was first seen August 18th, 1919; was 23 years of age, never pregnant. Her periods were regular, flowing moderately for seven days with no pain. She was married in June, 1918, and shortly after her marriage she developed a yellowish vaginal discharge which persisted for five months before treatment was instituted. Seven or eight months later she developed a fistula, which was operated upon. When she consulted me she was complaining of an irritating discharge and the fact that she had not become pregnant. Examination revealed a muco-purulent secretion from the vagina with the evidence of an old fistular scar which had broken down at the lower angle to the right of the anus and discharging a thin yellowish secretion. The reaction of the vagina was very acid. The cervix was normal in appearance. The uterus was small, in proper position, sharply anti-flexed. Smears were taken from the vagina, fistula and cervix, and it was found we had to deal with a colon bacillus and staphylococci infection. The patient was sent to the hospital and fistula's tract dissected out. From

this she made an uninterrupted recovery. Local treatments were then begun in November and the consistent of pure carbolic acid followed by alcohol to the cervix with phenolized iodine to the vaginal walls. Improvement was very slow, and the patient was still conscious of an annoying secretion. On February 23rd, 1920, an application of 20% nitrate of silver was made to the cervix, followed by much improvement from the endo-cervicitis. The thin milky vaginal discharge, however, continued, very acid in reaction, and quite irritating. The condition continued more or less unsatisfactory during the Spring, and I finally advised a curettage, but before doing this decided to try mercurochrome. This was instituted first on July 26th, 1920, using a one percent solution for five minutes. On the 27th the characteristic reaction had occurred, characterized by an increased purulent discharge. On the 29th, it was about the same, when the application was repeated. On the second of August, there was much less odor to the discharge, and very little secretion in the vagina. On the 5th the patient reported the discharge less in amount, and smears were taken which showed pus cells negative. Vaginal epithelium one plus; bacteria, a few pathogenic bacilli. The vagina looked moist and there was practically no discharge. On August 10th, the vagina looked clean, discharge very slight. On the 23rd, the vagina was clean and dry. Microscopic examination of smears proved negative and the patient was discharged.

**Case No. 7.** Miss H. B. This young lady came under my care March 30th, 1920, with an innocently acquired Neisserean infection. The disease was of about a week's standing and there was a large Bartholini gland abscess pointing in the right labia. She was sent to the hospital, and under gas an-

esthesia, this was opened and drained. Microscopic examination of slides showed a gonorrheal, staphylococci and colon bacillus infection. Not wishing to spread the infection nor interfere with nature's walling off of the structures at the cervix and anus, no internal douches nor enemas were given. The external genitalia were simply flushed off with warm boracic acid solution five or six times a day and the patient was kept in the Fowler position. A huge abscess developed rapidly on the left side, which was opened and drained April 18th. Later in the course of treatment, potassium permanganate douches of one to five thousand solution were instituted twice daily. The patient was in the hospital some six weeks. Smears taken June 7th were negative to gonorrheal, staphylococci and the colon bacillus. An application of ten percent nitrate of silver was made to the entire vagina on this date, and again on the 14th. As the sinuses were still discharging, cultures were taken, and Drs. Brem and Zeiler reported the organisms to be staphylococcus aureus and a gram positive diptheroid organism. On July 26th, mercurochrome injections were started. These were given on the following dates, the 27th, the 29th and August 5th and 7th. The vaginal discharge cleared up rapidly and slides taken on this date showed a few staphylococci greatly decreased in amount, gonococci negative, some few pus in epithelial cells. Treatments were continued every other day and on the 19th the slides showed a few pus cells, a few staphylococci, no gonococci nor streptococci.

The patient then went out of town for a month, and when she reported again in September, she only had a slight muco-purulent discharge, which unfortunately still continues and necessitates a douche about every other



day. The discharge seems to be made up largely of debris and a few pus cells.

The report of these few cases is of interest in showing how rapidly and quickly the vaginal and germ life is controlled by the use of this drug. Usually within a week or ten days, the microscope shows the bacteria life to have practically disappeared. Then we have only to deal with a simple vaginal secretion that readily yields to soothing applications. I am now using the solution in 2½% strength, and having the patient retain the solution about fifteen minutes, giving daily application for about one week.

### RADIUM RESULTS

Dr. Rex Duncan in his address before the State Medical Society said in part:

When the pathology is within the uterine wall, as in uterine fibrosis, myomata and fibroids and deeper, or when the uterus is not larger than a three months' pregnancy, the technique and dosage may be so modified as to afford relief of symptoms and a reduction in the size of the uterus, conserving menstruation in a certain percentage of cases where it is desirable to do so.

In women near or past the menopause, and where the uterus is not larger than a four months' pregnancy or in menorrhagia, due to disturbed ovarian functions, of non-inflammatory origin, radium is still the treatment of choice. When anemia, cardiac lesions or other constitutional disturbances, render the case a poor surgical risk, bleeding may be arrested and the symptoms relieved. In uterine fibroid, where the uterus is larger than a four months' pregnancy or in menorrhagia or metrorrhagia associated with acute inflammatory conditions, surgical treatment is usually preferable. I am sure that none of us

With those having relaxed perineal floors, it becomes necessary to hold the labia closed and thus keep the solution in while the application is being made, otherwise it all runs out. Within twenty-four to forty-eight hours there may be an increase in the discharge, due to the reaction, but this quickly subsides and the secretion rapidly becomes serous in character with a great improvement in the appearance of the mucous membrane. The chief objection to the use of the drug is the staining of clothing, but this is easily removed by the use of potassium permanganate 2½% solution, followed by the same strength oxalic acid solution.

would urge hysterotomy, with its immediate dangers, longer period of invalidism and post-operative sequelae, in a case where radium therapy would yield more satisfactory results.

The results of radium therapy in uterine cancer would alone be enough to establish it as one of our most valuable therapeutic agents. The results obtained in inoperable and recurrent cases together with greater facilities and improved technique have lead to the treatment of earlier cases, until today radium therapy properly applied, is considered by many of the most able gynecologists in this country the treatment of choice in all cases of cervical carcinoma.

\* \* \*

I would urge very strongly against incomplete surgery or surgery in operable cases, depending upon the post-operative use of radium to effect a cure. Such cases as a rule should much better be treated by radium alone or surgery used only as a means of assisting better approximation of the radium emanation to the involved areas.



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## EDITORIAL

### AMERICAN MEDICAL EDITORS' ASSOCIATION

The following resolutions were passed at the 52nd annual meeting of the American Medical Editors' Association, June 7th:

Whereas:

The medical restrictions of the Volstead Act, together with its various administrative and other interpretations and rules and regulations and enforcements, etc., constitute in some of their effects, indictment of the medical profession and harassment of the medical practitioner and the sick, and are obstacles to free pursuit of honest medical judgment and therapeutics, and have reacted to the detriment of society and the public health and are opposed to public policy;  
And Whereas:

Some of these restrictions and rules and regulations and interpretations, etc., are not based upon consensus of

medical experience and practice and established usage;

And Whereas:

It is apparent that they have not been framed and interpreted and administered with full appreciation of all matters involved;

And Whereas:

The precedent established by the Volstead Act in restricting medical practice, should, if physicians value their therapeutic liberty, be met with a protest that will command attention.

And Whereas:

The point at issue is the right of the physician to select his remedies, and to decide what doses of these remedies each patient requires;

And Whereas:

This issue in no wise affects and has nothing to do with propaganda either for or against prohibition, but is purely a matter of preserving the neces-

sary rights of the physician in the interests of public health and public policy:

Be It Therefore Resolved:

That the American Medical Editors' Association protests against further undue regulation of therapeutic procedure by statutes or by administrative interpretation or regulation;  
And Be It Resolved:

That the Association requests of the proper authorities a review and revision of such existing statutes or rules or regulations as may be unduly restrictive of the therapeutic judgment and procedure of physicians.

We ask this for the preservation of the necessary rights of the medical profession and in the name of public welfare and wise public policy.

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## EDITORIAL NOTES

Dr. Harlan Shoemaker is doing a noble work in securing money to erect a home for the Los Angeles County Medical Association; \$100 subscription from each of the 1100 members of the Society, payable \$25 per year, is the aim. We call the attention of Dr. Shoemaker to the building Dr. Soiland is erecting for his offices on Hope Street, near Fourteenth. Somewhere near there would be an excellent location.

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Dr. W. H. Kellogg, chief of the Bureau of Communicable Diseases of the California State Board of Health, spent part of the month of May and the first two weeks of June at the Los Angeles Branch of the State Hygienic Laboratory, 821 Pacific Finance Building.

Dr. Kellogg is doing everything possible to make this branch a first-class laboratory.

Before leaving for the north Dr. Kellogg secured the services as Technician of the Los Angeles Branch Miss Margaret Olmstead who for the past three years has been employed by Health Commissioner Powers in the City Laboratory.

Miss Olmstead is a graduate of Stanford University, having majored in Bacteriology. Remember, Room 821 Pacific Finance Building. Tel. Pico 3621, Station 13.

Dr. George T. Harding of Columbus, O., brother of the President, addressed the Los Angeles County Medical Association at a special meeting held in the Friday Morning clubhouse on the subject of the returned soldier. Dr. Harding is a Neurologist and spoke in a most interesting manner to a large audience.

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Dr. William Edler of the Public Health Service and for the past seven months State director for the United States Interdepartmental Social Hygiene Board, with offices in Los Angeles, left this city to take charge of the government hospital in Tacoma, where mental cases are being treated.

Dr. Edler is nationally known as one of the government's expert neurologists.

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Dr. Charles Lincoln Stoddard, well known San Diego surgeon, has been acquitted on a charge of murder through a criminal operation on Mrs. Lenora Helen Arnett. The jury returned the verdict after less than half an hour's deliberation.

The charges were brought some time ago in connection with the death of Mrs. Arnett. After the Coroner's inquest, at which Dr. Martha Whelpton, local physician, swore that Mrs. Arnett had asked her to perform the operation and had been refused, a

complaint was issued against Dr. Stoddard.

The defendant denied he had performed any operation, but said some one had operated before Mrs. Arnett came to his office.

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Dr. Irving J. Woodin, age 69, of Independence, California, died in Los Angeles May 10 of carcinoma. Dr. Woodin graduated from Long Island College Hospital class of '74, and was the pioneer physician of Inyo County.

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The medical profession of Los Angeles rejoice over the defeat of Mayor Snyder in his candidacy for re-election. Mayor Snyder defied the medical profession and said the people should have as much right to choose their method of being cared (doubtless meaning chiropractic, osteopath or Christian Science) as he had to choose his religion. The doctors accepted the challenge and Cryer was elected by over 6,000 majority.

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If no one claims the little bundle of humanity and the youngster proves as healthy as he now looks, the baby left in the machine of Dr. William Barnhart will be adopted.

Recently Dr. Barnhart told the police deceives that he answered a call at 542 South Boyle avenue. While he was inside the house attending a patient, someone left a bouncing baby boy in his automobile.

He promptly took the child to the Children's hospital for attention until time is given for some one to claim the mite. Should no one do so, Dr. Barnhart told the police he would take the youngster to his home, 530 North Larchmont boulevard, and adopt it.

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Dr. Simon Baruch of New York, graduate Medical College of Virginia, 1862, died June 3 from heart disease,

aged 80. Dr. Baruch was born in Germany, July 29, 1840. He received his preliminary education in Germany and after coming to America took up the study of medicine. During the Civil War he served as surgeon in the field with the Confederate forces. Following the war he practiced medicine in Camden, S. C., from 1865 to 1881, when he removed to New York. Dr. Baruch served as president of South Carolina Medical Association in 1874, and as chairman of the South Carolina State Board of Health in 1880. After removing to New York he became much interested in the subject of hydrotherapy, becoming professor in this subject in the College of Physicians and Surgeons. He is given credit for introducing the municipal public bath in this country and such institutions have been named in his honor in Chicago and in New York. He was a prolific contributor to medical literature, his writings including numerous articles as well as several books on hydrotherapy. He served also as medical editor on the New York Sun. Dr. Baruch had spent considerable time in Los Angeles and was well known here. His son during the recent war was one of President Wilson's closest advisers.

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Dr. Walter M. Dickie, Secretary of the State Board of Health, says:

A case of bubonic plague in a boy residing in the southern part of San Benito County was discovered last week. He lived in a squirrel-infected region about five miles from a ranch where a fatal human case of plague occurred last February. Both of these cases were undoubtedly contracted through contact with infected ground squirrels. The boy, through the prompt administration of serum treatment is apparently on the way to recovery.

While the above words were being written, advices of a suspected case of

human plague in Alameda County have been received and an investigation is being made. Plague is a real and live problem in California and cases of the disease must be expected to occur until such time as authorities are able to conduct a thorough campaign for the extermination of rodents.

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The service building at the Weimar joint tuberculosis sanatorium, maintained by eleven Northern California counties, was destroyed by fire last week. The patients were removed to the open air and were very well cared for during the emergency.

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Since Moore, Moore & White established their clinic for the practice of group medicine in Los Angeles several other groups in various cities have followed their example. Geo. W. Crile, the noted surgeon, is at the head of one of the most perfect organizations of this kind—The Cleveland Clinic, 93rd Street and Euclid Avenue, Cleveland. The building and equipment of the Cleveland Clinic cost over \$600,000. Dr. Robert C. Coffey and others have recently organized for the practice of group medicine and surgery in Portland, Oregon. The very latest announcement is of "The Santa Barbara Clinic for the Practice of Group Medicine," with Dr. Rexwald Brown at the head of a corps covering general surgery, obstetrics, internal medicine and several of the specialties. The Minnesota Clinic of Minneapolis is another notable group organization.

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The Municipal League of Los Angeles recommends the consolidation of the Los Angeles City and Los Angeles County Health Departments. In its report the league says:

"There is spent nearly one-half million dollars a year for health service,

throughout the cities and county of Los Angeles.

"Thirty-three cities in this county are going their respective thirty-three ways in the handling of health problems, which problems are to a great extent common to all of them and should be handled as such.

"The health service in most of the thirty-three cities is under the control of a part-time health officer who receives for his services on the average about \$35 per month, and whose chief concern, necessarily, with such small remuneration, must be for the building up of his own private practice. Some of these health officers are even laymen without an appreciation of the importance of reporting contagious diseases or of quarantining them.

"There is considerable overlapping of service, and friction due to the divided authority and responsibility of the various health officials."

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Dr. Danforth C. Cowles, graduate of the Medical Department of the University of Minnesota, practicing for several years at Fullerton, Orange County, California, recently pleaded guilty in the court of Wm. French, justice of the peace, to issuing prescriptions for liquor, and was fined \$800.00 and given a suspended jail sentence of 90 days.

Dr. Rex Vale Graves, graduate of the Homeopathic College of the University of Iowa, also practicing in Fullerton, plead guilty to the same charge in the same court and received the same fine and suspended sentence.

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For four years the Children's Open-Air Camp, under the auspices of the Los Angeles Tuberculosis Association, has struggled gallantly for existence. It shifted from Hermosa Beach to Devil's Gate, then to Tent City in the San Gabriel Canyon. Last year the



Los Angeles Tuberculosis Association, with the assistance of the County Board of Supervisors and the Los Angeles Junior Red Cross, secured the ground and erected a group of buildings. With this degree of permanency, the officers rechristened the camp, which will hereafter be known as the Children's Open-Air Preventorium.

The fifth annual season starts auspiciously for subnormal children. It opens a month earlier than usual, as hitherto the date has been July 15. But this year it opened on June 13, with the full capacity of 110 children. This extra month is the gift of the public, who so generously patronized the Christmas seal sale last December. Upon this sale depends the success of the local and State organizations. The tuberculosis associations of the State have established many camps, but the best open-air preventorium is maintained by the Los Angeles Tuberculosis Association in the San Gabriel Canyon. Conditions are ideal for the healing of body and spirit.

Steps to break up what is believed to be a narcotic ring operating in all parts of Southern California were taken by federal authorities recently by the arrest of Dr. August Greth, with offices in the Brockman building, and Dr. Corossa Gay, 1255 East Sixth street. The two physicians are charged with violating the Harrison narcotic act and were held in \$2500 bonds each. Against Dr. Greth were lodged 32 counts and against Dr. Gay 25 counts.

It was asserted by the federal authorities that the two doctors had furnished hundreds of prescriptions to drug addicts at prices ranging from \$2 to \$5. In a number of cases, it was said, the physicians had themselves dispensed the drugs.

Dr. L. C. Audrain, of Mazatlan, Mexico, is coming to Los Angeles to live.

Dr. M. A. Schutz, proprietor of the Elsinore Sanitarium at the Elsinore Hot Springs, has recently made extensive additions to his well-known institution.

Public health nursing is definitely established at Needles, in San Bernardino County, through the cooperation existing between the Red Cross and the County Welfare Commission. Large numbers of Indians, indigent tuberculosis patients and local problems provide a large field of work for a public health nurse in this desert community.

Dr. Chas. Teubner, pioneer physician of Oxnard, died at his home June first. He was born in New York in 1856, and educated in the eastern city, and received the degrees of Ph. G. from the University of the City of New York, and M. D. from Columbia University. He was admitted to the bar in 1915. He came west to San Francisco in 1890, and from there to Oxnard.

Dr. Walter M. Dickie, Secretary of the State Board of Health, says: "There were nearly 4500 cases of smallpox in California last year, and during the first quarter of 1921 the disease was more widely prevalent than ever before in the history of the state. In order that the disease may be brought under control quickly the general public is asked to cooperate with the local health officers in the strict enforcement of the State Board's regulations."

Dr. F. E. Corey, health officer of Alhambra, through the local papers, is urging parents to have their children

vaccinated during infancy. "Children need the protection more than adults," he says, "because smallpox is most severe and fatal in that period. Children under two years do not react severely, and often have no discomfort. Eighty-three babies have been born in Alhambra since January first. Every one of them should be vaccinated by January 1, 1922. They will not suffer nearly so much as older persons do, and then they will be protected during their most susceptible years. It is a very unkind custom to have the little folks unprotected until they are exposed. We should not wait till danger is near; if it worth doing when exposed, it is better to do it in infancy."

Dr. Harold Sidebotham, Dr. Philip Chancellor and his step-son, Oakleigh Lewis, of Santa Barbara, left recently for a motor trip to New York. They expect the trip to consume thirty days. Dr. Sidebotham will be joined by Mrs. Sidebotham in New York from whence they will embark for a two-year tour of the world. Dr. Chancellor will be joined by Mrs. Chancellor in Millwood, N. Y., which is to be their new home.

Fresno county employs two men in collecting licenses for dogs. It would appear that this is an excellent method for keeping down the dog population as under the provisions of the ordinance unlicensed animals may be destroyed. Since rabies is spread chiefly by stray dogs it would seem that the continued enforcement of this measure will have a great deal to do with keeping rabies in check within Fresno County.

Dr. C. H. Tillotson, of the U. S. Public Health Service, Hot Springs, Arkansas, was in Los Angeles recently visiting his father, Dr. H. J. Tillotson. The former is doing valu-

able research work for the government in connection with the treatment of syphilis. An average of 180,000 patients go to the Hot Springs for treatment each year.

Dr. E. E. Montgomery, the noted surgeon, has resigned the professorship he has held in Jefferson Medical College and will hereafter confine his energies to his private professional duties, with his offices at 1426 Spruce Street, Philadelphia.

Dr. Union Worthington of Salt Lake City died in Santa Monica, California, May 27th, and his body was sent to his former home for interment. Dr. Worthington was a graduate of Tulane University, 59 years of age, and was surgeon for the Utah Copper Company and the American Smelting and Mining Company.

Fifteen licensed, graduate, regular physicians of Los Angeles have purchased three lots near Washington and Central, where they propose erecting a hospital where colored patients, colored physicians and colored pupil nurses will be welcome.

This is an institution that is seriously needed, and should have the hearty encouragement of the medical profession of Southern California.

Dr. Geo. T. Harding, Jr., of Marion, Ohio, brother of the President, addressed the graduating class of the College of Medical Evangelists (Seventh Day Adventists) at Loma Linda on the evening of the 21st of May. Dr. Harding, who belongs to the Seventh Day Adventists Church, and is a graduate of the Cleveland University of Medicine and Surgery, came across the continent to address this class, which consists of eighteen members, two of them being women.

Dr. Edward Swift of Oxnard has located in Los Angeles.

Dr. Christopher Sheppard has been a practitioner in Ontario for 22 years. Dr. Stephen A. Craig, son of Dr. W. I. Craig of Upland, is now associated with Dr. Sheppard.

The National Medical Association, composed of 2,000 colored physicians, dentists and pharmacists, through its president, Dr. John P. Turner, Philadelphia, has addressed a letter to Mr.

Volstead, assuring him that the association is in thorough accord with the prohibition amendment and the laws of its enforcement, and stating that the organization does not feel that there should be any modification in the regulations for dispensing liquors.

We have received a reprint of parissaccular or sliding hernia by the well known Los Angeles surgeon, Dr. C. H. Criley. The paper appeared in Surgery, Gynecology and Obstetrics for December, 1920.

## BOOK REVIEWS

CANCER AND ITS NON-SURGICAL TREATMENT. By L. Duncan Bulkley, A.M., M.D. Senior Physician to the New York Skin and Cancer Hospital. Member of the American Association for Cancer Research. New York: William Wood and Co. Price \$6.00.

The aim of this book has been to establish on firm scientific grounds the proofs of the constitutional nature of cancer and to illustrate freely the value of this thesis by successful cases. In selecting cases for report the effort has been to select and present them in such a manner as would give a satisfactory presentation of the disease carcinosis, as its results or products affect various portions of the human economy, to which products, or local manifestations, the name of cancer is usually given. All this is in opposition to the more recent views as to its purely local nature, and to the idea that excision or removal in any way of the local lesions of the disease can possibly effect a radical cure of cancer. The comparison is constantly made between tuberculosis and cancer as indicating the radical difference in results between an intelligent and faithful application of medical principles and treatment, and surgery, in handling these two formidable enemies of the human race; for the mortality of the former has de-

clined about thirty per cent in the last twenty years, under wise medical care, while that of cancer has risen about thirty per cent in the same period, under surgical domination. While no absolute statement can yet be made statistically as to the reduction of mortality by a properly directed dietetic, hygiene, and medicinal treatment of cancer, the clinical portion of this work furnishes data from which may be judged some of its results. It is confidently asserted that when the principles and practice here laid down are fully understood, widely accepted, and generally acted upon, there will be shown a reduction in the mortality of cancer which will be conclusive and gratifying. We hope so. At any rate, such a statement from Buckley commands attention.

URINARY ANALYSIS AND DIAGNOSIS. By Microscopical and Chemical Examination. By Louis Heltzmann, M.D., New York. Formerly Professor of Pathology and Bacteriology, Fordham University School of Medicine, Fordham, New York, N. Y. Fourth revised and enlarged edition, with 135 illustrations, mostly original. New York: William Wood and Company, 1921. Price \$4.00.

In the preparation of the present edition of this work, the general plan of the previous editions has been adhered to. No extensive changes have

been found necessary, but the text has been thoroughly revised. New chemical tests, which have proven useful and of practical value, have been added. In the part devoted to microscopic examination some portions have been enlarged, others entirely rewritten, and a few old illustrations have been replaced by new drawings. The book is intended as a purely practical one. Only those tests are given which can be used with advantage and without the necessity of a completely equipped chemical laboratory, by the general laboratory worker and by the practitioner, who desires to do his own examinations, or to have a practical knowledge of urinary analysis. We know of no better guide in urinary analysis and diagnosis. than Heitzmann.

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**SQUINT.** Its Causes, Pathology, and Treatment. By Claud Worth, F.R.C.S. Consulting Surgeon to the Royal London Ophthalmic Hospital (Moorfields); Consulting Ophthalmic Surgeon to Queen Mary's Hospital for the east end. Fifth edition. Philadelphia: P. Blakiston's Son & Co., 1921. Price \$3.50 net.

Of the cases of squint in which efficient treatment is carried out from the first appearance of the deviation, only a small proportion will ever need operation. Operation is required in the majority of the neglected or inefficiently treated cases. A great advance here is the abolition of the "combined operation." The simple advancement operation admits of accurate adjustment, and the results have proved to be permanent. The appearance of a fifth edition is sufficient encomium; if you are interested in Squint, you will find this work worth while.

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**TUBERCULOSIS AND HOW TO COMBAT IT.** A book for the patient. By Francis M. Pottenger, A.M., M.D., LL.D., F.A.C.P., Monrovia, California. St. Louis: C. V. Mosby Company, 1921. Price \$2.00.

This is a so-called popular work, written by the medical director of a

private tuberculosis sanitarium in Monrovia, California.

The matter treated covers a variety of subjects, which have been chosen because they include most of the inquiries made by patients, thus: 1, simple truths about the disease; 2, the mode of action and reason for using the common measures which have proved of value in treatment; 3, a discussion of the common symptoms which are a source of concern and worry to patients; 4, weather conditions and ways of adapting one's self to the various changes; 5, the patient's part in cure; 6, the environment in which treatment is to be carried out; 7, measures for the prevention of the spread of infection; and 8, certain problems in which the patients are particularly interested.

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**RADIANT ENERGY AND THE OPHTHALMIC LENS.** By Frederick Booth, Introduction by Whitefield Bowers, A.B., M.D. Formerly Major, M.C., U.S.A. 230 illustrations. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. Price \$2.25 net.

The student of science will note that the effect of an ether wave is determined by its wave length and rate of vibration. We have the electrical heat, light, actinic and X-ray as examples. Waves within a certain range have been used in curing various diseases where drugs have failed. Lying hidden in the invisible and possibly visible portions of the spectrum are forces that, when properly harnessed, possibly will revolutionize medical science, and also replace steam and oil as propulsive agents. There is probably no better field for the imagination to flourish. To the imaginative and philosophical, this volume is a treat.

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## PRELIMINARY REPORT ON THE USE OF DIALLYLBAR- BITURIC ACID AND ETHYL MORPHINE IN OBSTETRICS\*

LYLE G. McNEILE, M. D.  
Los Angeles

In 1914 as a result of an article in a lay publication, the so-called "twilight sleep" as given at Freiberg received a tremendous amount of notoriety. It is now generally conceded that the reports regarding results obtained were very much exaggerated, and that method is not a safe one unless conducted under the most ideal hospital conditions. In the opinion of the writer the most important result of this has been the general stimulation of investigations having as their object the discovery of one or more safe, sane methods for the relief of pain during labor.

This has been true to such an extent that I believe practically every known drug has been tried, in a great many instances with disastrous results to mother and child.

In 1917 my attention was called to a report of a small series of cases in one of the German clinics, in which

the use of ethyl morphine in combination with diallylbarbituric acid was tried in an effort to produce what they termed a "new twilight sleep."

Ethyl morphine is the so-called Dionin commonly used by ophthalmologists, and possesses a pronounced sedative and analgesic action. It is rapidly oxidized, is relatively non-toxic, and when administered to a pregnant woman at any stage of labor, does not apparently have any effect in decreasing the strength of the uterine contractions, nor is there any apparent effect upon the infant.

Diallylbarbituric acid is a well known and commonly used hypnotic, apparently non-toxic when administered in  $1\frac{1}{2}$  grain doses, which may be repeated at hourly intervals up to a maximum of four doses.

Hussy, at the Woman's Hospital, Basle, Switzerland, used a combination of the two drugs which proved

\*Read before the Los Angeles Obstetrical Society.

to be a characteristic compound containing 61.4% ethyl morphine and 38.6% diallylbarbituric acid. In his series he found that the drug had a quieting effect upon the mother, that pain was relieved to a considerable extent, that uterine contractions were strengthened and the interval between contractions decreased, that uterine atony and fetal asphyxia were not observed more frequently than had been noted without the use of the drug, and that amnesia was seldom observed.

From this and several other reports which were brought to my attention I felt that there might be some advantage in making an independent investigation. The drug was ordered in April, 1918, from the Society of Chemical Industry, at Basle, Switzerland, and arrived in June, 1920. This report is based on the personal observations of myself and my assistants, upon private patients. We are at present doing some work on one of the obstetrical services at the Los Angeles County Hospital, but these reports are not available at present. In all 100 cases were studied.

### Object of the Investigation

Our object was to determine whether or not the combination described possessed any properties for the relief of pain during labor, or had any effect upon labor, or might result in any untoward effects upon mother or child.

### Method of Administration

The drug was administered by mouth only. In general I believe that the best effects were observed when the tablets were dissolved in one-third glass of warm water.

### Time of Administration

In no case was the drug administered prior to the establishment of regular labor pains, and beginning dilation. In general, the first tablet was given when the pains were of the

five to eight minute type, and dilation two to three fingers.

Routine orders were given to repeat the dose in one hour. In only three cases were three doses given.

### Use of Inhalation Anaesthetics

In accordance with my usual custom I have used nitrous oxide—oxygen or ether in every case as the head was passing over the perineum.

### Effects

The effect sets in quite rapidly, as a rule in from 15 to 30 minutes after the administration of the first tablet. The mother becomes somewhat sleepy, and this effect is increased after the administration of the second tablet. The tendency to sleep between pains becomes very pronounced, and the evidences of pain during uterine contractions, especially the vocal outcry, are markedly decreased. There is never amnesia, and we have never observed the effect described by the twilight sleep advocates, that of deep sleep, with stertorous respiration.

We have noted in nearly all of our cases that the strength of the uterine contractions is increased, and that the interval is decreased.

In my opinion the most pronounced effect has been upon the cervix. In over 80% of our cases there has been an almost immediate relaxation of the cervix, and very rapid dilatation. This has been especially pronounced in several cases of so-called "wirey os."

### Immediate and After Effects Upon the Babies

In no case was there any asphyxia observed, and there were no stillbirths. I realize that this is more or less accidental, since in any series of 100 deliveries one would expect some morbidity. It would indicate to me, however, that the drug does not have any pronounced effect upon the child. No after effects which could be traced

to the drug were observed.

### Immediate and Remote Effects Upon the Mothers

In no case was there any prolongation of the third stage, nor any evidence of more than the usual amount of hemorrhage. The patients did not seem to be particularly sleepy after delivery.

A vast majority of the patients were primiparae. Several of the multiparae volunteered the statement that their suffering had been markedly alleviated after the administration of the tablets, particularly as compared with previous labors.

### Tentative Conclusions

1. In this combination of drugs we have an agent which has considerable effect in relieving the pain of labor.
2. In connection with this effect, i. e., the alleviation of pain, we be-

lieve that the drug strengthens uterine contractions, decreases the interval between contractions, and promotes relaxation of the cervix.

3. We have not observed any ill effects upon either mother or child.

4. We have observed about 5% of absolute failures, and 20% of comparative failures.

This drug is not a cure-all, and in all probability is not suitable for routine administration to cases in labor. In our opinion its greatest advantage lies in the simplicity in the method of its employment, and its place of greatest usefulness will probably prove to be that group of cases in which the patient is a nervous, high strung woman, and which examination shows weak or ineffective uterine contractions associated with a rigid cervix.

## WHERE I HAVE FOUND THE DUODENAL TUBE OF VALUE\*

BY ROBERT POLLOCK, M. D.  
San Diego, California

While science is steadily progressive, it apparently moves by waves some of which roll higher and break more loudly than others.

The student of medicine like others finds his attention arrested at times by the new thoughts on oft-studied subjects; and soon he becomes so absorbed in these new thoughts that for a time he pays attention to little else. Then he is apprised and possibly surprised that many of his contemporaries throughout the land are concentrating their attention on the same studies. The chief reason for this general concentration of interest lies in the fact that from time to time men of genius discover certain facts

or perfect new mechanisms for which the world has apparently been waiting and which open up a new field of thought and work which many take advantage of about the same time. The result is a wave of unusual advancement. For the past decade we have been experiencing such a wave of advancing knowledge of the duodenum, which small area of our anatomy has been a center of interest alike for surgeon and internist.

From the standpoint of the internist practically all of our advance in knowledge has been made possible through the development of means by

\*Read before the Southern California Medical Society meeting at Santa Ana, April, 1921.

which to gain access to the duodenum\*. While many names punctuate our advance with the duodenal tube to its present state of usefulness, to Max Einhorn belongs the chief credit, for it has been his inventive genius that has paved the way time and again for further advance. Avoiding more or less stiff catheters, which he could early see would not lend themselves to continuous study, he began developing soft and flexible instruments, first using silk threads, then threads with beads attached, then ingenious little metal buckets. These he followed by passing a catheter along his thread and through the pylorus, and finally he used thick walled, small calibre, soft rubber tubing with a perforated metal capsule on the end. Beyond this nothing has been developed by others except to vary in size and shape and type the bulb that is used.

As this paper is not a history of the development of the duodenal tube I prefer to omit all other names to whom credit might be given for their participation therein. As far back as 1889 Boas first claimed to obtain bile and pancreatic fluid through a stomach tube; but without an Einhorn it is doubtful where we should be today in this matter.

So much has been written during the past ten years, and so many enthusiastic theories advanced and backed by honest work, that the internist who attempts to follow closely the progress in duodenal work is at times in honest doubt as to what he believes.

In a society such as ours it has seemed to me that the free exchange of personal views and experiences has been one of its chief charms; and that what is most acceptable from the essayist is a frank expression of what he considers of practical value in the

matter discussed. No time will be given to the discussion of methods which I have not personally tried; and of course my failure to find value in certain procedures does not mean that they are valueless in your hands.

Upon the early work of Einhorn done between 1908 and 1910 is based most of the later work by himself and others (1) on determining the chemistry and bacteriology of the bile and pancreatic juice, (2) on diagnosing pathologic conditions of duodenum, pancreas, liver and gall bladder, and (3) in the application of the various dietetic and therapeutic measures making use of the duodenal tube.

Practically all of the duodenal work may be summed up under these three groupings.

Discussing group one, I would express the feeling that any standardising of methods or the inference drawn from results has not yet been reached, although enough work has been done by various workers to allow of certain statements being expressed without controversy.

A. In our work, we are making chemical and bacteriological studies of the fluid removed whenever we enter the duodenum for any purpose. Our personal observations lead us to believe the following regarding the chemistry and bacteriology of the duodenum.

(1) That persistent (on repeated examination) lack of the activities of trypsin, amylapsin or steapsin as shown by chemical tests is suggestive of pancreatic inadequacy.

(2) That the estimation of trypsin activity alone in most cases serves our purpose, as the various enzymes of the pancreas seem to travel together as do the pepsin and rennin of the stomach.

\*The X-ray is commonly used to study the shape and movements of the duodenum; the duodenal tube enables us to study the duodenal contents.—Editor.



(3) That these ferment activities are roughly determined by stool analyses, with intestinal test meals, and that this latter method is less annoying to some patients.

(4) That repeated ability to grow streptococcus strains from bile expressed from the gall bladder is suggestive of an infected gall bladder, and is rendered of greater significance when accompanied by evidence of stasis in that viscus.

(5) That the continued presence of pus and the ability to obtain staphylococcus cultures in themselves do not necessarily mean gall bladder pathology.

In this connection I think there is much to be done toward standardizing our methods of bacteriological study, and we must ever bear in mind that the duodenum is a link of the gastrointestinal tract continuous at each end with areas impossible of sterilization.

B. Some points determining pathology that seems to be brought out by the duodenal tube are:

(1) That recovery of pus and blood from the duodenum is distinctly corroborative of other evidences of duodenal ulcer.

(2) That recovery of large amounts, 200 cc. or more, of thickened, dark-colored bile from the gall bladder, with increase of its characteristic epithelial debris, is positive evidence of gall bladder stasis, and favors stone formation.

(3) That a normal appearing bile recovered repeatedly from the duodenum with a normal amount, up to 100 cc., of somewhat similar bile from the gall bladder can almost rule out pathology.

(4) That entire inability to express any bile from the gall bladder, with the knowledge that the liver is secreting bile, furnishes positive evidence of obstructive pathology of some kind.

This may be stone in the cystic duct, a bladder so filled with calculi that it cannot express itself, or with bile so thick that it cannot be expressed, or with walls so thickened by inflammatory change as to have lost their contractility, or so pressed upon from the outside by adhesions, foreign growths, etc., as to be fixed beyond the power of expression.

C. In the matter of using the duodenal tube for dietetic and therapeutic treatment, while much has been expressed in recent literature, I can discuss in very few sentences my own personal experience.

Doubtless at some time or other we have all resorted to duodenal feeding to release the stomach for a time from the necessity of secretory and motor work. The broadest field for the exercise of this method has been in the treatment of gastric and duodenal ulcer, and following Einhorn's original regimen of a meal of milk, egg and sugar every two hours the individual's weight and strength can be kept up to par for the two or three weeks ordinarily necessary to heal the ulcer. I have never seen a hemorrhage or evidence of other injury that could be attributed to the using of the tube in this application, and many patients submit to it rather gracefully, and after the first day or two complain but little of the throat annoyance that the tube causes. However, since Sippy has perfected his neutralization treatment for stomach and duodenal ulcer he has left little to be desired, and I feel today that the more closely we follow the methods laid down in his monumental essay of 1915 the less need we will have to resort to duodenal feeding. This need in no sense depreciates the value of Einhorn's work, which will undoubtedly remain a method promising success where most others have failed. Personally I still occasionally resort to the duo-

denal feeding in obstinate gastric or duodenal ulcers. Besides peptic ulcer the only condition in which I have used duodenal feeding with success has been in cases of nervous vomiting, but not the vomiting of pregnancy. Here our chief trouble has been to have the tube swallowed, but the temporary moderate use of opium in suppository has enabled us to place the bulb in the duodenum before nausea reappeared.

In the treatment other than dietetic of pathological conditions of the gastrointestinal tract I still adhere routinely to but two procedures, although I have considerable faith, coupled with hope, in relation to one or two others.

The ones we routinely use are the transduodenal lavage as outlined by Jutte, which I feel, supplementary to colonic lavage, is of distinct value in chronic ileocolitis and many of the conditions more or less vaguely classified as intestinal toxemias. Three cases of epilepsy developing after twenty-one are included in this latter grouping as receiving benefit from this procedure. We adhere to the nine per thousand solution of sodium sulphate and sodium chloride.

The other procedure which we have been following somewhat routinely for the past year is the attempt to improve cases of early gall bladder stasis by "stripping the gall bladder" at increasing intervals by means of a 30% solution of magnesium sulphate.

As my practice is almost entirely an office practice I have had no personal experience with the use of argyrol, sulphate of magnesium and other agents placed directly in the duodenum in the treatment of acute catarrhal jaundice, but I have every reason to believe that this will remain an established field for the use of the duodenal tube.

Another phase of duodenal treat-

ment with which I have had some experience, not altogether encouraging, I yet feel is destined to be of future value. I refer to the treatment of intestinal protozoa by means of transduodenal flushing and medication from this point. It seems to me that ipecac with value can be placed in the duodenum in sufficient quantities to drive the ameba from the upper intestinal tract where it is perhaps less tenacious than in the colon, while at the same time local treatment is applied through the colon from below and emetin or neosalvarsan placed directly into the blood stream. Certain it is that much still remains to be done before our handling of this very stubborn intruder can be looked upon as entirely successful. As to the flagellate protozoa, whose pathogenicity at times I cannot doubt, it has occurred to me as to others that a transduodenal attack upon these intruders ought to be the most successful, but thus far the chemicals that we have found to promptly destroy the flagellates in vitro have proven unavailing when applied to the duodenum in strength as high as we felt justified in using. However, I am still hopeful of better things in this direction.

To discuss in detail the methods of procedure here outlined would be superfluous in most cases. Einhorn's classic, "Duodenal Feeding" is as familiar to most of you as to me. The "Transduodenal Lavage" technique of Jutte is so typical of all lavage by this route that a few words of explanation may be in order; and the procedure of gall bladder drainage either in its diagnostic or therapeutic application is of such comparatively recent introduction and has been so broadly discussed in the clinics during the past year that I may be pardoned a brief resume of the principles and technique involved.

I have said that little has been added to Einhorn's work except the introduction of some modification of his bulb. I might add, however, that the bulb of his work has been verified by other workers. I herewith present a few of the bulbs now in use in duodenal work. The Einhorn bulb of gold with very small apertures being one of the smallest, weighs only 33 grains; only the Jutte bulb with a weight of 21 grains being lighter than it. Then in order of ascending weight comes the Lyon bulb of 61 grains, the Rehfus bulb of 66 grains and the Palefsk bulb of 105 grains. In our work we find the bulb of Rehfus adaptable to most stomach and duodenal work and we seldom resort to the others, although I still prefer the Einhorn for duodenal feeding.

Next to the perfection of an apparatus suitable for duodenal work we have waited for the perfection of a technique that would make duodenal studies practical as office procedures, and we have been vying with one another for the past half dozen years in obtaining as high a percentage as possible of successful intubations based upon a time limit of 15 to 30 minutes. A procedure requiring more than 30 minutes in getting started can scarcely be termed practical as applied to office work. The rules laid down by Franklin White of Boston in 1916 constitute in my opinion the best description of a working technique in the literature. At that time he claimed over 60% of successes in all cases attempted. I feel that we are doing considerably better than that today.

It gives me pleasure to quote Dr. White's original instructions as it is practically this technique that we have followed for the past five years. "The tube passed on more steadily if it was swallowed at a rather slow rate. It was important not to try to feed it in too rapidly, for the tube tended

to kink or roll up and delay its passage. It was desirable to have very little slack, but to have the capsule move along steadily ahead of the tube. This was best arranged as a routine by swallowing the tube to the 50 cm. mark in the erect (sitting) position; then slowly in to 60 or 65 cm. in the second position; then slowly in to 70 or 75 cm. in the third position, taking about five minutes in each position. For the second position the patient leans forward, slowly lies down on the abdomen, and turns upon the right side. For the third position he turns partly or wholly on the back with the pelvis raised by a pillow." The careful observance of these rules enables us to pass the pylorus in most cases in from 15 to 20 minutes. A drink of water taken when the second position is begun helps the passage. In conditions of known pylorospasm 1/100 grain of atropine or 10 grains of aspirin taken before the procedure is begun is of value. In marked gastric ptosis we have found it necessary to manipulate the bulb guided by the fluoroscope in order to have it engage the pylorus.

Once through the pylorus, its presence in the duodenum is readily verified by the aspiration of fluid, differing in appearance and chemistry from that taken from the stomach. It has been our custom to start a siphon flow into a sterile bottle, through a tubing with glass links, so that we are immediately apprised of the change in appearance of the fluid being withdrawn. We rarely now resort to the milk test, as we feel that it is objectionable in studies on the fasting subject. The difficulty is not in knowing when the tube is in the duodenum but in getting it there.

With the bulb in the duodenum and the third mark on the tubing at the lips, thus measuring about 75 cm. from the incisors, aspiration, lavage

and medication are simple matters.

The transduodenal lavage of Jutte consists of running slowly through the tube from a low pressure reservoir a litre of warm sterile water containing in solution nine grammes each of sulphate of sodium and chloride of sodium. This solution is supposed to pass through the intestinal tract with little or no absorption, thus acting admirably as a flushing solution.

The "Gall Bladder Drainage" of Lyon is based upon Melzer's Law of Contrary Innervation as applied to the gall bladder, and consists in injecting through the tube 50 to 100 cc. of a sterile 25 to 30% solution of magnesium sulfate. This solution when placed in the duodenum above the ampulla of Vater is credited with relaxing the sphincter muscle of Oddi that guards the outlet of the common bile duct, and at the same time contracting the muscle fibres in the wall of the gall bladder. Obviously this favors drainage of the gall bladder through its physiologic outlet, and a study of the bile collected through the tube furnishes the basis for the conclusions already expressed. To Dr. B. B. Vincent Lyon of Jefferson Hospital belongs the credit of promptly utilizing in a practical way the principle expressed by Dr. Melzer of the Rockefeller Institute.

Nothing has commanded broader interest during the past year among the students of gastro-enterology than this new work which has by no means reached its final stages of discussion. One result even greater than the increased knowledge of pancreas or gall bladder that we hope may accrue from it is the long sought means of establishing the degree of efficiency of the liver.

The question raised by these newer methods of studying the chief laboratory of digestion of the body are so numerous and divergent that it seems

an appropriate time for us to pause and contemplate the work already done and scrutinize the conclusions drawn therefrom.

1200 First National Bank Building.

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Small private hospital and practice, 12 years established, for sale. Two doctors retiring. Large reception room, two private offices. Laboratory, chemical, microscopic and X-Ray. Operating room and four beds. Electric bath cabinet and library. All fully equipped with modern furniture. Value \$4000. Will sell  $\frac{1}{4}$  or  $\frac{3}{4}$  or entire. Address personally. Box 216, Douglas, Ariz.

We are assured that this is an ideal location and equipment for two active young doctors who can speak Spanish. —Editor.

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In the British Medical Journal of July 16th appears a five-page original article by Dr. Cecil E. Reynolds of Los Angeles, entitled "Infective External Hydrocephalus (shifting epilepsy)." The article is illustrated by four photographs on special art paper. This speedy recognition in Great Britain of original research carried on in Los Angeles is most gratifying, and doubtless encouraging to the author, a former citizen of that country. We would urge you to read this article. We are all interested in epilepsy, the bete noir of the past. Reynolds' work is intensely interesting and we believe really illuminating.

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## EDITORIAL

### TYPHOID FEVER

The following correspondence gives an idea how wide-awake and efficient Dr. Walter Dickie, Executive Officer of the State Board of Health, and Dr. J. L. Pomeroy, Health Officer of Los Angeles County, are in regard to Typhoid fever morbidity. The city of Los Angeles is in a group of three or four showing the lowest death rate from Typhoid fever of any cities in the world, and Dr. Pomeroy shows that the unincorporated portion of Los Angeles County has a still lower death rate from this disease.

Department of Health  
Los Angeles County, California.

July 25, 1921.

Dr. George E. Malsbary, Editor,  
Southern California Practitioner,  
1414 S. Hope St., Los Angeles.

Dear Doctor:

In reading your editorial notes of the June number I noted a quotation from Dr. Walter M. Dickie relative to low rate of typhoid in cities and the high rate in the rural districts. No mention is made of the extremely favorable rate in Los Angeles County, which is unfair to our department. One reason why we do not have better work in the rural districts is because those who are working in these districts receive very little encouragement.

I wish to call your attention to the fact that the typhoid fever death rate in the unincorporated districts of Los Angeles County is approximately 4 per 100,000, and last year we did not have a single death from typhoid fever in our territory. This rate is actually lower than for the larger cities of the United States including Los Angeles City. I am opposed to such statements regarding the rural districts, and it is unfair that sani-

tariums have gotten into the habit of failing to qualify their statements in regard to rural conditions. I could point out many conditions in cities which are much more unfavorable as regards to typhoid fever than conditions prevailing in Southern California.

Yours very truly,  
J. L. POMEROY, M. D.,  
County Health Officer.

In commenting on the above Dr. W. M. Dickie, Secretary and Executive Officer of the California State Board of Health, says:

July 27, 1921.

I am in receipt of the letter addressed to Doctor George E. Malsbary by Doctor Pomeroy. The article that he refers to is speaking of the State in general. There are quite a few communities in the state which never have any typhoid at all and when you consider that Doctor Pomeroy in the unincorporated districts of the County of Los Angeles includes a very small population, it would be foolish to make an exception in such an article to this small populated area. As to whether he has or has not had any cases of typhoid fever in the unincorporated districts of the county during the last year, I would have to look that up in our morbidity records.

Yours very truly,  
W. M. DICKIE,  
Secretary.

DR. E. D. JONES

Surgeon, Hunter, Naturalist

Have a side-line is the best advice we can give to every physician. This side-line may be golf, archery, hiking, motoring, literature, civics or one of many other possibilities, but have one and avoid being narrow. The Los Angeles Examiner of recent date says, editorially:

A man with a noble obsession is a real good to any community. That reflection will occur to everybody who thinks of the simple and unostentatious service that one of our citizens, Dr. Edward D. Jones, is engaged upon in the cause of public education, he having introduced the work of natural history group installation in Southern California several years ago.

Dr. Jones is not a writer of school books nor yet a schoolmaster. On the contrary, he is a mighty hunter and explorer and his obsession is to serve his kind by placing before them, in realistic conditions of background and surroundings, a fine collection of the wild creatures of the North American and other continents.

Already he has organized and made two expeditions into the mountains of Alaska and the Yukon Territory and has brought back many fine specimens of mountain goats, mountain sheep,

moose and caribou. These are being carefully mounted and will form the nucleus of what will be a valuable natural history department of our growing and useful Southwest museum.

Specimen by specimen, Dr. Jones is building up a collection which at no distant time will be a valuable addition to the attractions of Los Angeles.

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The following new members were elected at the meeting of the Los Angeles County Medical Association, July 25, 1921:

Walter G. Baetz, M. D., 301 S. Pacific Ave., Huntington Park; Tilman H. McLaughlin, M. D., 5300 Hollywood Blvd.; John W. Prendergast, M. D., 510 W. 31st St.; John W. Robinson, M. D., 1124 Logan St.; Pierre Viole, M. D., 822 Chapman Bldg.; Frank M. Wilson, M. D., 453 S. Spring St.

## EDITORIAL NOTES

The following new members were admitted to the Los Angeles County Medical Association June 20, 1921:

Charles B. Adams, M. D., 220 Baker-Detwiler Bldg.; Donald E. Baxter, M. D., 833 S. Manhattan Place; C. W. Burke, M. D., 921 W. 54th; Burns Chaffee, M. D., 623 Markwell Bldg., Long Beach; Carl Fisher, M. D., 820 Baker-Detwiler Bldg.; J. M. Hancock, M. D., 624 Cons. Realty Bldg.; Jas. F. Holleran, M. D., 510 Van Nuys Bldg.; R. R. Montgomery, M. D., 22 Orange Ave., Long Beach; Gustav F. Ruediger, M. D., 800 Auditorium Bldg.; Henry N. Shaw, M. D., 505 Haas Bldg.; C. E. Steen, M. D., Gardena, Calif.; Francis E. Shine, M. D., 1120 Brockman Bldg.; Chas. W. Shirey, M. D., Lankershim; M. E. Trainor, M. D., Hermosa Beach; Wm. A. Walters, M. D., 1501 S. Figueroa St.; Ernest G. Tillmanns, M. D., 511 Cons.

Realty Bldg., transfer from Imperial County; T. O. Luckett, M. D., 412 Brockman Bldg., transfer from Imperial County.

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### Rabies in Los Angeles

Fourteen persons are said to have received the Pasteur treatment recently in Los Angeles and vicinity. Examinations of dogs' heads in the Hygienic Laboratory of the State Board of Health proved positive for 22 heads received since the first of the year. In addition, reports of 9 clinical cases in animals and 1 human death have been received. Two human deaths from this disease have occurred in Sacramento County this year, and 1 human death has occurred in Contra Costa County since the first of the year. The disease of the present time, however, seems to be more widely prevalent in Los Angeles and

vicinity than in other parts of the State. Fresno, San Joaquin and Stanislaus Counties, through the strict enforcement of measures for the control of the dog populations, have apparently eliminated the disease from their communities. Los Angeles has issued warnings to parents to keep their children away from stray dogs, but it is possible that compulsory muzzling of dogs must be required unless the situation improves.

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Another case of botulism due to the use of improperly home-packed products resulted in the death, recently, of a woman resident of San Jacinto in Riverside County. On July 7th she merely tasted of home-packed beans which, because of the disagreeable odor noticed upon opening the can, were not eaten in quantity. Most of the contents were thrown out to a flock of chickens, seventy-five of which died. Of these, 39 died the second and third day after. Symptoms first appeared in the woman about 72 hours after tasting the beans. She died five days later. The day after the can of beans was opened a jar of home-packed fish was unsealed and eaten in small quantity. The fish apparently was in good condition, however, and there is no reason for suspecting this product. The State Board of Health has issued repeated warnings concerning the danger in using improperly packed fruits and vegetables. The following cautions prepared by Dr. Ernest C. Dickson, Stanford University Medical School, are reprinted here from the State Board of Health Monthly Bulletin for September, 1920:

"Prevention of botulism depends not upon curtailing the use of home-canned or commercially-canned foods but upon the education of those who use canned foods as to the possible

danger which may accompany their use and the methods for avoiding those dangers.

"No canned food, or indeed any food, which shows the slightest sign of spoilage, whether in appearance or odor, should be served as food, or should be tasted to see whether it is good.

"No canned foods which have not been processed at high temperatures should be served without having been thoroughly cooked after they are removed from the container; this is especially applicable to vegetables of the types which are frequently served as salads.

"In case canned food shows evidence of spoilage it should not be discarded where other persons or domestic animals or fowl can gain access to it unless it has been thoroughly cooked.

"If it should happen that domestic animals or fowl develop signs of poisoning after eating discarded food which has been tasted or eaten by human beings, medical advice should be sought at once in order that, if the botulinus toxin is at fault, anti-toxin may be given in time to be of value."

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Dr. Walter M. Dickie, Secretary of the State Board of Health, says:

A "dog insurance company" is said to have been organized in Alameda County. In order to secure a policy covering the life of a canine it will be necessary for the animal to pass a physical examination and upon his death a statement showing the place of burial must be presented to the insurance company. It is said, further, that police authorities will be asked to investigate all deaths of dogs if the circumstances indicate accidental death by poison or by violence. No provision has been made for the filing of birth certificates for dogs, but this procedure may be required at some

future time. Is it possible that owners of dogs may be more punctilious in securing vital registration for their dogs than they are for their children? Stranger things than this have happened. Although California is in the birth registration area there is still room for improvement in the registration of human births. Local registrars of vital statistics must be on their guard lest more certificates for dogs than for babies be placed on file. The opponents of animal experimentation have laid great stress on alleged cruelties to dogs by research workers. Will they now engage in propaganda for promoting the welfare of dogs through efforts to secure complete registration of all dog births and deaths?

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Dr. W. H. Kiger is in his new offices in the Pacific Mutual Building.

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Dr. Hubert Walk, the president of the A. M. A., in his Boston address arraigned those physicians who make a business of prescribing alcohol, calling them "educated criminals" whose ethical principles would disgrace a bar-tender, and still further telling them that "such offending physicians were only tolerated by the public because of the integrity, efficiency and self-abnegation of a majority of medical men so great that these derelicts almost escaped notice."

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Dr. A. A. Maulhardt, of Oxnard, was recently re-elected Health Officer of Ventura County after a spirited contest with Dr. Thibodo of Ventura. The position pays \$50 per month.

Dr. E. W. Fleming, the Oto-Laryngologist, and Dr. Frank W. Miller, the Occulist, have taken offices on the eighth floor of the Pacific Mutual Life Building.

Dr. N. H. Morrison, age 68 years, died at his residence, 1253 West Adams Street, Los Angeles, July 3, 1921, after a long illness. Dr. Morrison had for many years been chief surgeon of the Santa Fe Railway, a position he filled with ability. The funeral, which was largely attended, was conducted by Presbyterian clergymen and the Masonic Lodge of which he had long been a member. He leaves a son, the well-known surgeon, Dr. Wayland A. Morrison, three daughters, and the widow.

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Calexico celebrated on July 13 the eightieth anniversary of the birth of Dr. William Fawcett Smith, who is the medical dean of Imperial County. Born in England, educated in its classic institutions of learning, the doctor came to the United States during the civil war period. He has been engaged in the practice of his profession for fifty-eight years. For a time he was located in Panama, and for six years he was in charge of the department of health in the island of Porto Rico. Calexico has been his home for several years past.

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Dr. Leon H. Watkins has taken offices in the Merchants National Bank Building.

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The annual meeting of state, county and municipal health officials will be held in Santa Monica in September. The meeting will be held in conjunction with the convention of the League of California Municipalities, and every health officer and public health nurse in the State should be present. Further details regarding the meeting will be supplied later.



# SOUTHERN CALIFORNIA PRACTITIONER

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Editor:

DR. GEO. E. MALSBARY

Associate Editors:

Dr. Walter Lindley, Dr. W. W. Watkins, Dr. Ross Moore, Dr. George L. Cole,  
Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton,  
Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. C. G. Stivers,  
Dr. Olga McNeile, Dr. W. H. Dudley, Dr. J. M. Mathews

## A PSYCROPATHIC STUDY OF POE

By **WALTER LINDLEY, M. D.**

EDGAR A. POE, A STUDY. By John W. Robertson, M.D. Part I—A Psychopathic Study. Part II—A Bibliographic Study. Printed by Bruce Brough, San Francisco, for California Practitioner by C. C. Parker, 520 West Sixth St., Los Angeles.

Byron, Sir Richard Burton, George Borrow and William Blake were all writers of genius, each of whom would furnish a profitable study for a psychologist, but Edgar Allan Poe, our great (shall I say our greatest) American poet, is the first of modern authors to be favored with such attention.

Dr. Robertson is peculiarly fitted for this task. As an alienist he ranks, in the eyes of the profession of California with Dr. H. G. Brainerd, while, in addition, he is a noted and incorrigible bibliophile and has in his invaluable collection on Russian Hill, San Francisco, first editions of practically everything that Poe wrote.

Edgar Allan Poe was editor of and contributor to several magazines pub-

lished from 1825 to 1845, and Dr. Robertson has delved into many dusty piles of what the average reader would consider junk, and thus secured files of value for writing this "Study" among them are the Southern Literary Messenger, published in Richmond, Va., 1835; the Yanks, and Boston Literary Gazette, published in Boston, beginning 1829; the American Museum of Science Literature and the Arts, a monthly magazine published in Baltimore, beginning 1836; Graham's Ladies' and Gentlemen's Magazine, published in Philadelphia; the New Mirror, published in New York, was another to which Poe was a frequent contributor; the Pioneer, a Literary and Critical Magazine, published its first number in 1843.

The Broadway Journal and several other publications have been carefully studied by Dr. Robertson in order to secure all possible light on Poe's psychopathic condition. It was this abnormal mental condition that led

Poe from time to time to resort to alcohol to the point of delirium tremens, and to opium, so that finally at the age of 39, he was rescued from the gutter to die in a Baltimore hospital, long before his time. That Poe suffered from inherited dipsomania, there is no doubt, but in spite of this psychopathic handicap what a marvelous output there was in the few short years of his adult life.

"The Raven" first appeared in the *Mirror* (N. Y.) in 1845. Dr. Robertson believes this single poem is probably better known to the world than any other in English literature. He may be right, but my judgment is that Gray's "Elegy" is the best known; particularly the stanza:

"The boast of heraldry, the pomp  
of power,

And all that beauty, all that wealth,  
e'er gave,

Await, alike, the inevitable hour;

The paths of glory lead but to the  
grave."

In writing of the psychopathic side of the poet, Dr. Robertson says the term "drunk" is a condition of physical paralysis accompanied by mental confusion with that more serious condition of forgetfulness or mental alienation. . . . Poe could take large quantities of stimulants without producing physical drunkenness . . . We must judge Poe by his works rather than by the hasty and ill-natured conclusions of certain of his contemporaries. He should have been classed with those equally unfortunate, because of heredity or habit. Lamb, Shelley, Swinburne, Coleridge and De Quincey as associates would have formed a literary Aidenn, which even Poe, as solitary as he was, would have welcomed. In addition to his use of alcohol, there is no doubt that Poe occasionally indulged in opium. It

is equally certain it never became a habit. De Quincey, in his "Confessions," states that he ordinarily took 8000 minims of laudanum daily—equivalent to 320 grains of opium and eighteen ounces of alcohol. This shows the possibilities of the habitue.

The idea that is abroad that Poe, with all his genius, was a villain, an ingrate, guilty of unbridled passions and immoral practices, was due, according to Dr. Robertson, to the venom and vicious envy of Rufus Wilmot Griswold, who wrote the first extended notice of his death (*New York Tribune*, 1949,) wrote the first biography of Poe, and was the editor of the first edition of Poe's celebrated works. It was due to the biography sent out by Griswold that the *Edinburgh Review* said: "Edgar Allan Poe was incontestably one of the most worthless persons of whom we have any record in the world of letters . . . He seems to have succeeded in attracting and combining, in his own person, all the floating vices which genius had hitherto shown itself capable of grasping in its widest and most eccentric orbit." Griswold was in death to Poe as the old leech in "The Scarlet Letter" was in life to the conscience-stricken clergyman.

Dr. Robertson makes a very interesting quotation from one of Poe's reviews, "Is Bryant a better poet than Longfellow? Certainly not, for in Longfellow's pages the spirit of poetry—ideality—walks abroad, while Bryant's sole merit is tolerable versification and fine marches of description. Longfellow is undoubtedly the best poet in America."

Toward the close of this section of the work, Dr. Robertson says: "The insanity of genius has become a familiar theme because so many psychologists and pseudoscientists have

endeavored to point out a close relationship." From my limited observation, my opinion is that Dr. Robertson, in order to impress the contrary idea, rather overstates his proposition when he says: "Insanity chooses, for its victims, not the highly intelligent, nor the genius, but rather the subnormal and the unwashed." If he had placed the phrase "more frequently," before "chooses," the statement might pass unquestioned. During the latter years of Poe's life, his habits and his thoughts became more and more unreasonable. He wrote "Eureka," a volume in which he talks volubly of Newton, La Place and Kepler, and evolves a new theory of the universe, "and we find him a paranoid vociferously voicing unintelligible hypotheses based on misconception and ignorance of natural laws." The author states that "there are too many Christian Scientists, Oliver Lodgists and others of the religionists for us to be able to draw a distinct line between those merely credulous and the mentally unsound." In concluding this section of the work the writer says: "Poe's alcoholic excesses were something for which he was not responsible. His drinking was the result of hereditary compulsion." Poe was a handsome man with wonderful eyes. He was worshiped in his home, particularly by his wife's mother, who writes: "I always sat up with him when he was writing, and gave him a cup of hot coffee every hour or two. At home he was simple, and affectionate as a child, and during all the years he lived with me I do not remember a single night that he failed to come to me and kiss his 'mother' before going to bed." The mutual devotion of Mrs. Clemm and her son-in-law should do much toward counteracting the coarse mother-in-law stories that are so gleefully circulated. Dr. Robertson's ded-

ication of his work is as follows: "To my wife, who for thirty years has enjoyed with me my book collecting and my book collection." It was Henry Ward Beecher who said his wife looked askance at some of his book expenditures so he had his purchases taken to his study at old Plymouth Church, and from there he would take them home, one book at a time and surreptitiously place them on his library shelves.

In the comprehensive bibliographic section of this monumental volume, Dr. Robertson shows his affection for the works of Poe and for good old books in general. That his valuation of Poe is widespread the sale of Poe first editions is ample proof. In 1918 a first edition of Poe's "Tamerlane and Other Poems," Boston, Calvin F. S. Thomas, printer, 1827, sold for \$11,600, while \$1000 is an unusually low selling figure for even the least desired of Poe's first editions.

Poe personally knew and loved Chief Justice Marshall and wrote a short and most appreciative biographical sketch of the great jurist covering twenty-two columns.

Poe did not write with the idea of inculcating a lesson or expressing the thrills of passion, but his great aim was the development of the beautiful. In one of his essays he says: Truth gives expression to the intellect, Passion to the heart, while Beauty is the language of the soul.

Tennyson said: "I know several striking American poets, but I think that Edgar Poe is (taking his poetry and prose together) the most original American genius." To Victor Hugo "Poe was the Prince of American Literature."

This valuable volume that we have in hand is the latest authoritative word on Poe, and no library will be

complete without it, and no reader will really know Poe unless he studies it.

One of Dr. Robertson's concluding sentences is: "If ever there was an 'inspired' poet it was Poe."

No doubt the second edition will have a complete index, which will add much to the value of this typographically beautiful book.

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The earliest college of medicine, says Mousson-Lanauze (Paris medical, Feb. 26, 1921), rose, as was proper, in the cradle of civilization, in ancient Greece, in Upper Thessaly, on the slopes of Mount Pelion. Its founder and its first and only professor was Chiron, the centaur. All Greek heroes were taught by him, but among his pupils only one, Aesculapius or Asclepius, equaled the master in renown. He learned from his teacher the curative properties of plants, the art of treating wounds, and the formulas to relieve or eradicate disease. In fact, he even surpassed his master; and the tradition goes that, not satisfied with curing the sick, he even attempted to resuscitate the dead. Aesculapius' two sons, Machaon and Podalyre, were also sent by him to the Thessalian school. If we may credit the Homeric epic, they were the real organizers of the first known army medical corps, in which capacity they took part in the siege of Troy. All of Chiron's pupils became more or less famous. According to Mousson-Lanauze, all these legends, which finally became part and parcel of Greek life, were testimonials to the profound respect in ancient times for scientists and especially physicians. "A physican," says the Iliad, "is worth many men." Homer reflects the popular views which placed among the gods Apollo, the father of medicine, Aesculapius, his son, and Chiron, the wondrous centaur who founded the first school of medicine.

Of particular interest to physicians is the change made in the Vital Statistics Registration Law at the last session of the Legislature with reference to the time for filing **Birth Certificates**. Heretofore the law required that Birth Certificates be filed within 36 hours. This has been changed to **four days**. It is sincerely felt that this is a reasonable time and we earnestly request your co-operation in the matter of filing all Birth Certificates within the **four days** specified. For information concerning registration districts, local registrars, etc., address L. E. Ross, State Registrar of Vital Statistics.

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The British Medical Journal for Saturday, July 16, 1921, devotes six and one-half pages to an article on Infective External Hydrocephalus ("Shifting Epilepsy") by Cecil Reynolds, M. D., D. P. H., M. R. C. S., Los Angeles. This paper is illustrated by unusually good plates.

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#### JOURNAL A. M. A.

**Poliomyelitis Prevalent.** August and September generally bring an increase in the number of cases of poliomyelitis. The United States Public Health Service advises that this disease is not unduly prevalent throughout the country. The increase that has been noted in California is not unusual, although it appears that in some communities a considerable number of cases have been reported. San Francisco has reported a large number of cases recently and at least 9 cases have occurred in Sacramento during the past month. Health officers are urged to secure prompt reporting of cases that may be suspected as poliomyelitis. The State Board of Health should be advised immediately of any cases that may occur.



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## EDITORIAL

### STANDARDIZATION OF SPEECH CORRECTION METHODS

At this time when high standards are being sought for in all lines of professional work, it is interesting to note that a movement for the standardization of speech correction methods has been started by a member of the profession here. Dr. Charles G. Stivers of Los Angeles, who for the past ten years has been interested in and working for the correction of speech defects, has recently returned from several weeks spent in the large cities of the East conferring with other specialists in the work.

There are in all about twenty physicians who specialize in this subject, and perhaps five hundred teachers, instructors, and assistants whose preliminary training in the Anatomy, Physiology and Psychology of speech, both normal and abnormal, has fitted them to appreciate the importance of the prompt adoption of standards of study and practice for all who would

treat patients who have defective speech. The subject is receiving a great deal of attention at various universities. At the University of Iowa, there is a speech clinic, which means really a group of scientific men who are studying speech, both normal and abnormal, from every angle. The University of Wisconsin also has a well equipped speech laboratory with courses in the subject. Northwestern University has given a summer course in speech defects this year and the University of Utah gave a similar course in 1920. Columbia University has a well organized speech laboratory and the University of Pennsylvania has a speech clinic in its graduate school.

Many men and women are getting training necessary to fit them for this specialty and the time seems opportune to have the subject taken up by the American Medical Association and standard courses of study outlined and their adoption advised.

## EDITORIAL NOTES

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Demonstrations of the Potter-Bucky diaphragm Coolidge tube technic and the Vistor Kearsey stabilizer are to be given at 930 South Hill street, September 22-28th. These demonstrations are part of an educational campaign that is being conducted by the Vistor X-ray Corporation, and is the beginning of their system of educational service, that is to be part of their service work. There will be no charge for attendance at these demonstrations, and all are invited, no matter what apparatus they may have or be operating.

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In Baltimore there were 7500 arrests for drunkenness in 1918, against 5096 in 1919, and 1785 in 1920. Arrests for all causes were 62,076 in 1918, 50,027 in 1919 and 41,988 in 1920. Yet some people in Baltimore say that "prohibition does not prohibit." It does a lot more than prohibit; it prevents crime and punishes criminals—and the criminals object.

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**Oakland Starts War on Rats.** Dr. H. E. Foster, newly appointed health officer for Oakland, has started intensive warfare against rats on the waterfront and near the municipal garbage dump. Dr. W. T. Harrison of the United States Public Health Service, together with representatives of the State Board of Health, visited Oakland this week, at the request of Dr. Foster, for the purpose of planning a campaign against the rodents. An increase in the rat population of many cities has been noted. Oakland is to be commended for starting renewed efforts against this old enemy to the public health.

Under date of September 9th the Los Angeles Times publishes an Associated Press telegram from Toronto, saying:

"Prohibition was blamed for the scarcity of bodies furnished to medical colleges for dissecting purposes by Dr. J. B. McCurich, professor of anatomy at the University of Toronto, in an address today before the Canadian Embalmers' Association.

"Since prohibition became effective, he declared, men belonging to the class that formerly died destitute, through indulgence in liquor, were now leaving money enough to give them a burial, and colleges rarely obtained bodies from that source."

Another strong argument in favor of free "likker."

---

**Dog Meat as Food in Germany.** According to the report of the German imperial slaughter houses and meat inspection offices during the second quarter of the year 1919—that is, during three months—the meat of 3,642 dogs was subjected to inspection, 2,301 in Saxony alone. The number of horses slaughtered was twice that of peace time. There was such demand for horseflesh that the number slaughtered could easily have been ten times that of peace time; but there was a great shortage of horses in Germany owing to difficulty of importation. With the rise in the number of horses slaughtered, there was a decrease in the slaughtering of calves and pigs. The traffic in these animals was not more than one-fortieth that of peace time.

Col. H. E. Fisher, Chief Health Officer of the Panama Canal, says, in a recent report:

Malaria from cattle camps and plantations also shows a marked reduction, believed to be due largely to the continued use of prophylactic quinine. While it is admitted that this procedure is not ideal, and that, under ordinary circumstances, there are better ways of controlling malaria, the isolation of these camps, their temporary nature, and the class of labor (these being largely recruited men from the infected native population) seem absolutely to require the use of quinine. Every evening for the first two months following the beginning of employment, each man is given 10 grains of quinine sulphate. After this first period of 2 months, each man is given the same dose morning and evening of each Wednesday as long as he remains in camp. While this treatment is not compulsory, by the co-operation of the foremen it is fairly well carried out, and the malaria incidence has been lowest in those camps where the prescribed measures have been followed closely.

For the sterilization of malaria carriers and the "follow up" treatment of cases of malaria the Chief Health Officer has approved, as the standard for routine treatment, the administration of 10 grains of quinine sulphate by mouth, every evening before retiring for a period of 8 weeks. This is the procedure recommended by the subcommittee on medical research of the National Malaria Committee.

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The California State Journal of Medicine says:

In Oklahoma a man has been sentenced to five years in the penitentiary for infecting a girl with syphilis. In Nebraska the court upheld a doctor who warned a hotel keeper that one

of his patients, a guest at the hotel, had syphilis and had refused treatment and was consequently a menace to the public health. In North Carolina a woman has been awarded \$10,000 damages against her husband for a similar infection, and the Supreme Court has upheld the judgment.

The Nebraska case is important because it asserts that a physician's duty to protect the public health may, under certain circumstances, transcend his duty to hold his patient's confidence inviolable. The North Carolina case is also important because it sets aside in this particular case the legal barrier that prevents a wife from testifying against her husband and bringing suit against him.

Twenty States have already adopted laws forbidding persons with venereal disease to marry; seven of these—New Hampshire, New Jersey, North Carolina, Oregon, Washington and West Virginia—having acted during the present year's sessions. Similar bills are now pending in several States.

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Brem, Zeiler and Hammack have removed their offices to the tenth floor of the Pacific Mutual Building, Sixth street and Grand avenue.

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The examination for certificates of public health nurses will be held October 15th, 1921, at 9:00 A. M.

In San Francisco—City Hall, Civic Center, Civil Service Commission, Room 154.

In Los Angeles—at the office of the State Board of Health, Room 821, Pacific Finance Building.

The examination will be confined to the practical phases of public health nursing.

## BOOK REVIEWS

**OPERATIVE SURGERY.** By John Fairbairn Binnie, A.M., C.M. (Aberdeen); F.A.C.S. Surgeon to the Christian Church, the Research and the General Hospitals, Kansas City, Mo.; Fellow of the American Surgical Association; Membre De Societe Internationale De Chirurgie, Member of the Western Surgical Association. Eighth edition, revised and enlarged, with 1628 illustrations, a number of which are printed in colors. Philadelphia: P. Blakiston's Son & Co. Price \$12.00 net.

We are glad to see an eighth edition of Binnie's Surgery. Since the previous edition of this work was published, death has claimed Gwilyn G. Davis and Walter S. Sutton, who contributed valuable chapters on "Congenital Luxation of the Hip" and on "War Surgery." Dr. Frank D. Dickson (lately Lt. Col. and consultant in Orthopedics to the 3rd Army, A. E. F.), has revised the chapter of his teacher and

ant in Roentgenology, A. E. F.), has revised such portions of Sutton's article as had to do with the localization of foreign bodies by roentgenological methods. Most of the article on War Surgery has been omitted. Probably the greatest changes in this new edition will be found in the chapters on Thoracic, Abdonimal and Plastic Surgery, which have been practically completely rewritten.

If we were to offer a criticism, it would be that the descriptions and portrayals are so lucid and simple as to lead to the impression that there are no formidable operations. (lately Lt. Col. and associate consultant, Davis. Dr. E. H. Skinner

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# SOUTHERN CALIFORNIA PRACTITIONER

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## UTERINE FIBROIDS IN PREGNANCY

An Analytic Study of Three Hundred and Eighty Cases Collected from the Literature and Other Unpublished Personal Cases, All Operatively Treated

BY AIME PAUL HEINECK, CHICAGO, ILLINOIS.

### A Pathological Predisposition

During pregnancy, women are subject to many pathological conditions that influence gestation, parturition and sexual life. It is important that physicians, obstetricians, gynecologists and surgeons become increasingly familiar with the nature, the significance and appropriate treatment of these abnormal conditions.

### Reference to Appendectomy

Investigation and personal experience have confirmed my previously expressed conviction that every case of appendicitis occurring during the pregnant state calls for the timely removal of the appendix. Timely removal of the appendix is immediate removal. Appendicitis does not warrant the artificial induction of abortion or premature labor. Timely and skillful removal of the diseased ap-

pendix neither interrupts gestation nor complicates parturition.

The frequent co-existence of appendicitis and cholelithiasis and its sequelae led me to investigate the significance of cholelithiasis previous to, during, and after pregnancy. My personal clinical observations supplemented by the study of the literature on the subject, convince me that cholelithiasis is a surgical disease not amenable to unaided medical treatment. At all periods of gestation, active cholelithiasis with or without sequelae calls for the removal of the biliary calculi present, irrespective of size, shape, number or location, and for the correction of the associated pathological anatomy. Appropriate operative measures palliate or cure the manifestations of cholelithiasis and its sequelae, exert no harmful influence on gestation, and do not in any appre-

cialable degree impair the expulsive power of the abdominal muscles.

In the course of operative work on the female pelvis, I have encountered cases of uterine fibroids, some associated with appendicitis, others with gall bladder disease, a few ectopic, pregnancy, any many more with uterine pregnancy. Curious to know the influence of fibroids upon pregnancy and of pregnancy upon fibroids, and conscious that the subject had not received adequate attention, I collected and consulted the cases reported in the English, French and German medical literature during the years 1909-1918 inclusive. The results are embodied in this paper.

#### Survey of Cases.

The opinions expressed in this paper are based on my personal experience supplemented and controlled by an analytical survey of cases reported with adequate data and in which the diagnosis of fibroids complicating pregnancy received operative and post-mortem confirmation. I collected 380 cases answering the forementioned criteria. Most of the patients were white, a few were colored.

#### Discussions

Uterine fibroids affect all races and originate only during woman's menstrual life. They are found in nulliparae, primiparae, deutiparae, and multiparae. They are more frequent than ordinarily suspected; however, no matter if comparatively rare, inasmuch as two lives are at stake, the subject demands thorough discussion. Any part of the uterus may be the seat of a fibroid; even the entire uterus may undergo myomatous degeneration. Uterine fibroids are found associated with pregnancy single, twin, multiple, uterine or extra-uterine, and occur in gravid uteri, otherwise normal, or the seat of one or more other anomalies, congenital or acquired.

#### Influence

Though uterine fibro-myomata do not prevent the intra or extra-uterine imbedding of the fertilized ovum, it is known that they exert an unfavorable influence upon conception, gestation, labor and the puerperium. In many of the reported cases, the number of previous pregnancies is not stated. The cases which I analyzed admit of the following tabulation:

Nulliparae .....	19
Primiparae .....	101
Deutiparae .....	30
III-parae .....	12
IV-parae .....	8
V-parae .....	7
VI-parae .....	6
VII-parae .....	3
VIII-parae .....	3
IX-parae .....	1
XI-parae .....	1
XIV-parae .....	1
Not stated.....	188

\*The numbers refer to illustrative cases.

#### Age

There is no genus of tumors which has such a definite age of distribution. Uterine fibroids only arise during the menstrual period of life. Most of the cases reported occurred after the 30th year. In 272 cases, the age of the patient at time of operation is recorded. The youngest patient was 19 years old, three were 45 years old. In the remaining cases, the age and time of operation is shown in the following table:

19 to 24 years inclusive.....	17
25 to 29 years inclusive.....	54
30 to 34 years inclusive.....	84
35 to 39 years inclusive.....	76
39 to 44 years inclusive.....	37

#### Variability of Fibroids

Fibroids vary in number, location, size, anatomical relation and also in shape, contour, consistency, structure, mode of attachment and rate of

growth. The uterus may be the seat of one, two, three, or many fibroids originating from the cervix, from the body, or from both body and cervix: 154 of the cases under consideration presented one fibroid; 22 cases, two fibroids; and 56 cases, several fibroids. As stated, these tumors vary in size and shape. They are described as being pear- pea- orange (16 cases); fist- 15 cases; child's head sized, 14 cases, and size of an eight-month pregnancy, etc. They are globular, ovoid, kidney-shaped, dumb-bell-shaped, etc. They often vary in consistency, soft in places and of wooden hardness elsewhere.

### Seat

Fibroids of the cervix or of the corpus uteri unfavorably influence the female organism. They hinder conception, though not absolutely preventing it. Cervical fibroids are of rarer occurrence than those of the corpus, are commonly single and quite often complicated by one or more submucous fibroids of the uterine body. They arise from any part of the cervix; from its walls in such a way as to occupy the cervical canal; from the periphery, and not invade the cervical canal, and frequently burrow under the peritoneum on the anterior or posterior aspect of the uterus. Submucous cervical fibroids not uncommonly prolapse into the vagina.

### Classification

A classification serviceable alike from the anatomic, diagnostic and therapeutic view-points, is based on the relation of the tumor to one or another of the various layers of the uterus. Thus fibroids are said to be subperitoneal, interstitial or submucous. In many cases more than one uterine layer is involved, and in a few, the whole uterus appears to have undergone fibro-myomatous degeneration. In looking over the case

reports, we note the following distribution;

	Cervix	Body
Subperitoneal .....	2	66
Interstitial .....	29	74
Submucous .....	8	28

### Mechanical Effect

Uterine fibroids by virtue of their weight, volume, and location, displace the pregnant uterus forward, laterally, upward, downward, or backward, causing pathological anteversion, ante-flexion, latero-version, latero-flexion, retro-flexion, even pelvic impaction and pelvic incarceration of the uterus. Such displacements are temporary, but they become permanent, if inflammatory adhesion of the tumor to neighboring structures or organs take place. Retro-uterine fibroids adherent to the pelvic floor can become as immovable as intraligamentous tumors.

### Nutritional Changes of Fibroids

When pregnancy occurs in a myomatous uterus, the nutrition of the fibroid is unfavorably influenced by the altered conditions, and hypertrophy and softening result. The hypertrophy is consequent to the increased vascularity number and size of the tumor tissue cells. The softening is largely due to oedematous infiltration of the fibroids and allows changes in the shape of the tumor, such as flattening against the uterus, against the pelvic wall, etc.

### Fibroid Tissue Changes

Fibroids like other tissue-masses are subject to inflammatory and degenerative changes. These changes occur previous to, or after abortion, or premature labor; previous to or after full-term labor. Owing to their low vitality, fibroids offer little resistance to invading germs implanted upon or conveyed to them from the uterine cavity or elsewhere, by way of the lymphatics or blood-vessels. In-

flammation of a fibroid terminates in gangrene, partial or complete, central or peripheral, in suppuration or in the formation of adhesions. Adhesions of inflammatory origin displacing and fixing the gravid uterus, interfere with its functions and those of contiguous viscera, and are an important factor in the etiology of dystocia.

### Types of Inflammation of Fibroids

Inflammation of fibroids may be suppurative in type, leading to abscess formation. Gangrene may supervene either before, during, or after gestation, during or after abortion, premature or full-term labor, or in the course of the puerperium. Gangrene is due to different factors; circulatory and nutritive disturbances, pressure within or outside of the uterus, lessened leucocytic defense and ease of infection of neoplastic tissue. Axial torsion of the pregnant myomatous uterus, torsion of the pedicle of a subserous myoma, incarceration or impaction of tumor in the small pelvis, etc., not infrequently result in gangrene and peritonitis.

### Degenerations of Fibroids

Fibroids are subject to calcification, to fatty, cystic, myxomatous, or red degeneration. Degeneration occurring in the interior of fibroids can lead to grave peripheral complications. Red degeneration of fibroids is an aseptic necrobiotic process characterized by hemolysis and autolysis of tissues. The tissue of the fibroid is necrotic and refuses to strain. Occasionally met in non-gravid myomatous uteri, it is more frequent, more extensive, and more intensive in uterine fibroids co-existing with or complicating pregnancy. A fibroid the seat of red degeneration presents on section a raw-meat, brown or mahogany color which darkens on exposure to the air. The color is due to the laking of blood in the necrosed tissue, and diffusion of

blood pigment into the cells. In over fifteen cases herein considered, one or more of the fibroids had undergone red degeneration.

The process of red necrosis may advance to complete liquefaction of the tumor with rupture either into the peritoneal or uterine cavity and secondary infection. In four cases, distinct evidence of cystic degeneration was present, the cyst wall being formed by the capsule and the periphery of the tumor; the cyst contents, by a chocolate colored fluid.

### Concomitant Pathological Conditions

Pathological conditions co-existing with uterine fibroids are either purely co-incidental or determined partly or wholly by the neoplasm. The frequent association of uterine fibroids with localized peritonitis, with disease of uterine appendages, is too well known to call for more than a passing mention.

### Diagnosis of Co-existing Pregnancy and Fibroids

Without repeated examination, the diagnosis of co-existing pregnancy and fibroids is difficult to establish. It is desirable, though not possible, to make a clear diagnosis before operation. A number of pregnant myomatous uteri have been removed in total ignorance of the existence of gestation. Until the presence of the foetus is directly detected by palpation of the foetal parts, and confirmed by auscultation of the foetal heart, only a presumptive diagnosis of pregnancy is possible. If pregnancy and uterine fibroids co-exist in the same patient, the signs of both states can usually be detected when both conditions have reached a certain stage of development. The signs of pregnancy may be mimicked by fibroids and vice versa. Some signs, as uterine souffle, bluish discoloration of the vaginal walls, Braxton-Hicks intermittent



uterine contractions, etc., are common to both conditions. Ballottement and abdominal palpation give analogous findings in pregnancy and in movable subperitoneal fibroids. Uterine bruit can be produced by pressure of tumor on the uterine vessels. Submucous fibroids protruding through the uterine canal into the vagina, can be seen and directly felt.

#### Signs and Symptoms: E. G., by Pressure

The mechanical objective and subjective symptoms of fibroids are determined to a large extent by the location, number, size, shape, structure, rate of growth, and other characteristics of the neoplasm. By virtue of their weight, volume and prolongation, fibroids often exert pressure upon neighboring structures and contiguous organs. Pressure upon the vascular channels are provocative of an oedema involving the legs; upon the nerves of the sacral plexus, of pain; upon the intestines, of intestinal obstruction. Pressure upon the rectum would cause rectal tenesmus. Pressure upon the kidneys and ureters is followed by anuria and uraemia; and pressure upon the urinary bladder, by vesical tenesmus.

#### Signs and Symptoms of Inflammation and Degeneration

Inflammation and degeneration occurring in fibroids determine local and constitutional symptoms. All degenerations, all acute inflammation of fibroids give rise to pain varying in duration and intensity according to the extent, acuity and nature of the pathological process. The pain may be severe enough to necessitate the use of opiates.

During pregnancy, degeneration should be suspected whenever uterine fibroids become tender and painful. Tenderness is closely associated with pain. This tenderness, fever and pain in uterine fibroids are provoked by

one or the association of two or more of the following factors:

1. Rapid and sudden increase of tumor, irrespective of cause.
2. Oedematous infiltration.
3. Serious mechanical pressure exerted by the new growth upon the rectum, bladder, ureter, etc.
4. Pelvic impaction or incarceration of tumor.
5. Bacterial inflammation of myoma or myomata, phlegmonous, suppurative or gangrenous in type.
6. Degeneration of tumor, cystic, red, etc.
7. Torsion of tumor's pedicle.
8. Torsion of pregnant myomatous uterus on its long axis.
9. Peritonitis, localized or diffuse.
10. Simultaneous adnexal disease, with or without peritonitis.
11. Abortion or premature labor.

#### Diagnostic Examination

A fibroid is a deformity and if very bulky causes bulging and asymmetry of one or more abdominal regions. Abdominal and vagino-abdominal palpation enables us to obtain suggestive and fairly accurate information relative to size, shape, consistency, mobility and anatomical relations of uterine fibroids. A co-existing pregnancy makes the interpretation of the palpatory findings more difficult.

#### Influence on Woman's Productivity

To what extent uterine fibroids lessen a woman's fecundity is yet undetermined. In married myomatous patients, sterility is more common and fecundity rarer than in married women of a corresponding age with normal uteri. Fibroids may so displace the cervix that it is not bathed in seminal fluid during the sexual act; they may obstruct the uterine cavity or compress the interstitial portion of the tube. When the fibroids are multiple, large or near the mucosa, gestation is rare. Small subserous myomas do not diminish the faculty to conceive. In a general way, the chances

of conception diminish in proportion to the size of the tumors and to their influence upon the uterine mucosa. Submucous fibroids determine the greatest endometritic disturbances:—atrophy, changes in the uterine glands, inflammation, etc., and therefore, of all fibroids, they are the most frequently associated with sterility.

#### **Influence on Woman's Reproductivity**

Uterine fibroids as a rule impair a woman's reproductive powers. A woman is more liable to conceive after the successful removal of fibroids. According to Winter, 18 to 20 per cent of women under 40 years of age conceive after the conservative removal of myomata.

#### **Influence on Conception**

Women having uterine fibroids conceive less often, and when they do so for the first time, it happens at a later period of life than women with normal uteri. In the cases studied, 101 were recorded as primiparae. Many of these had been married for a number of years.

Menstrual disturbances and uterine hemorrhages, so suggestive and so symptomatic of fibroids in the non-pregnant uterus, occurred in the cases which form the subject matter of this paper. In the majority of cases, the uterine leucorrheal and hemorrhagic losses which antedated the pregnancy, continued throughout its course. The nature, duration, and degree of these menstrual and other uterine disturbances are influenced by the size, number, location and structure of the fibro-myomata present in the gravid uteri; however, it has been repeatedly observed that the amount of the hemorrhage bears no fixed relation to the volume of the fibroid.

#### **Menace to Pregnancy Due to Implantation**

Uterine fibroids are a great menace to pregnancy, during its entire course.

They frequently cause abortion, premature labor or death of foetus with retention of ovum in utero.

A placenta partly implanted upon a submucous or an interstitial fibroid does not develop normally. Placenta accreta, partial detachment of the ovum, etc., may result. When the chorionic villi become imbedded upon a part of the mucosa covering a fibroma, the placental development is abnormal. The ovum may atrophy and the foetus die.

#### **Due to Uterine Displacement**

All uterine displacements, retroversion, retroflexion, prolapse, etc., and all uterine tumors predispose to abortion and premature labor. Pelvic incarceration, pelvic impaction, inflammatory adhesion of the fibroid or fibroids to pelvic structures impede the enlargement and ascent of the pregnant uterus.

#### **Neoplastic Cause of Abortion**

Important in the causation of abortion are the inflammatory and degenerative changes to which neoplasms are subject. It goes without saying that the causes of sterility and of abortion that obtain in women with normal uteri are equally operative in myomatous women.

#### **Neoplastic Cause of Endangered Pregnancy**

When a woman with a uterine fibroid conceives, it is certain that her life is in jeopardy, and not only as long as the foetus remains in utero, but also when it is expelled, whether this occurs prematurely or at term. The danger to the child's life is proportionate to the amount of obstruction, duration of labor and method of delivery. Fibroids, cervical or corporeal, intensify the discomforts of pregnancy to such a degree that at times operative relief becomes imperative. Fibroids retard or arrest the expulsion of a living or dead child

through the natural channels, and not uncommonly demand the employment of radical means of delivery. Delivery per vias naturales in certain cases of retro-uterine or retro-cervical tumors is impossible. A large tumor may so deviate the uterine axis that the presenting part does not enter the pelvic brim, and an abnormal foetal presentation results. The presence of one, two or more tumors and the resulting poor accommodation of the foetus to the natural passages, not infrequently causes faulty or vicious foetal presentation:—shoulder, left-sacro-anterior, foot, transverse, breech, etc. Fibroids by their volume and their location may obstruct the natural passages and prove a bar to normal labor. A cervical tumor may prevent dilatation, and blocked labor, if unrelieved, may result in rupture of the uterus.

#### Neoplastic Pathologic Placental Period

Uterine fibroids interfere with and weaken uterine contractions; they are commonly the cause of uterine inertia, thereby prolonging labor. Intramural myomata occupying a great part of the uterine wall may prevent uterine contraction and retraction. Uterine inertia, impaired uterine contractility and retractility, pathologically adherent placenta, tortuosity of the cervical canal are incident to myomatous uteri and frequently cause retention of placental tissue and post-partum hemorrhage.

Placenta previa and adherent placenta are unusually frequent in pregnancy associated with uterine fibroids. Changes in the uterine mucosa incident to the presence of fibroids, and invasion of ovum upon the tumor often cause the placenta to be abnormally adherent. These pathological adhesions interfere with the spontaneous expulsion of the afterbirth and may necessitate manual or instru-

mental separation of the placenta. In fibroids complicating pregnancy, the post-partum and puerperal hemorrhages may be abundant. They are due to retained placental tissues, to atony of the uterus, or to the fibroid itself.

During the puerperium, fibroids delay involution, predispose to thrombophlebitis, obstruct the lochial flow, and often become infected and necrotic from injury incident to delivery. Purely obstetrical assistance as forced delivery or extraction past the tumor entails the danger of contusion or embolism. Immediately after delivery, there ensue in uterine fibroids, circulatory and degenerative changes predisposing them to infection. Submucous fibroids, owing to their location and to the lengthening, compression and bruising of pedicle attending the child's passage through the maternal passages are frequently infected.

#### Spontaneous Expulsion of Fibroids

The spontaneous expulsion of submucous fibroids into the vagina is accompanied by free bleeding and has been mistaken for a miscarriage. It is observed chiefly in connection with small-based submucous myomata, at labor and during the puerperium.

#### Expectant Treatment

Expectant treatment has dangers, namely, postponement of the climacteric to fifty odd years, formation of submucous nodules causing repeated hemorrhages, cardiac degeneration, thrombosis and embolism, and malignant degeneration of tumor tissue. We consider it unsurgical to abandon the patients to the uncertain influence of the menopause. Fibro-myomas are not innocent tumors which are cured by the menopause.

#### Operative Treatment

Fibroid tumors of the uterus are a surgical disease and like neoplasms



in other organs are amenable only to operative removal. Surgery eliminates the danger of sepsis, be it puerperal or other, following degenerating bruised or infected myomata, and averts many complications resulting directly or indirectly from fibroids.

### Time and Indications

It being agreed that operative treatment is called for in fibroids complicating pregnancy, the next thing to determine is when to operate. The tolerance of the gravid uterus to operative procedures is known. When a fibroid gives rise to symptoms that lead to its detection, there is considerable likelihood that the underlying disturbance will endanger the patient's health and life. Early operation allows conservative procedures where delay may entail the sacrifice of the uterus. At the end of pregnancy, the woman is in an unfavorable state of health for recovery from a major operation. Operative intervention is imperatively indicated in the presence of the following:

1. Bad general condition of mother. Often myomatous patients are first seen in a deplorable general condition, the result of hemorrhage, accompanying disease of the endometrium, adnexa or puerperium, conjointly or separately.

2. Intolerable pain.
3. Inability to work.
4. Dyspnoea due to size of tumor.
5. Rapid growth of tumor.
6. Extreme abdominal distention.
7. Renal insufficiency.
8. Pelvic incarceration or pelvic impaction of tumor.
9. Repeated and profuse hemorrhages.
10. Torsion of tumor's pedicle.
11. Rotation of the uterus on its long axis.
12. Gangrene of tumor, partial or

complete, central or peripheral.

13. Tumor degeneration, cystic, red, etc.

14. Septic complications.

15. Size and multiplicity of fibroids impeding the normal progress of pregnancy.

16. Severe pressure on neighboring organs, rectum, bladder, ureter, etc.

17. Fibroids that are a hindrance to birth through normal channels. (In these cases forceps and version are contra-indicated.)

18. Fibroids in the body of the uterus interfering with uterine contractions.

19. Fibroids obstructing the outflow of lochia.

20. Fibroids springing from the back of the lowest segment of the uterus.

The following operative procedures have been advised:

1. Induction of abortion and premature labor.
2. Myomectomy:
  - (a) Vaginal
    - (1) by morcellement.
    - (2) pedicle ligated and tumor removed.
  - (b) Abdominal
    - (1) tumor freed from the surrounding organs and pedicle ligated.
    - (2) enucleation.
3. Cesarean Section:
  - (1) not immediately preceded or followed by any other operative act.
  - (2) with myomectomy.
  - (3) with hysterectomy.
4. Hysterectomy:
  - (a) Vaginal.
  - (b) Abdominal:
    - (1) Supra-vaginal.
    - (a) less disturbing to the statistics of the pelvic organs.



(b) of more rapid and easier execution.

(c) lower mortality.

(2) Total.

(a) if cervix is myomatous or otherwise diseased.

(b) if there is any suspicion of malignancy.

Abortion accidental or induced, exerts no curative influence on uterine fibroids. In the treatment of myomata, it is an illogical operation as it sacrifices the product of conception and in no wise protects the mother from the peril of fibroids. It should be rejected absolutely. In myomatous uteri, the dangers incident to abortion are enhanced.

1. Hemorrhage is at times alarmingly profuse and difficult to control.

2. Retention of decidua and impeded escape of blood and lochia can be caused by cervical obstruction or displacement and uterine distortion.

3. Retained placental tissue can be due to various factors, tortuosity of the cervical canal, defective uterine contractility, pathologically adherent placenta, etc.

4. The susceptibility of post-operative sepsis is increased in cases of this nature.

5. Subinvolution is engendered by the presence of myomatous nodules in the uterine wall.

### Myomectomy

Myomectomy has been successfully performed in gravid uteri at all periods of gestation. There are two objections to myomectomy:

1. It does not prevent recurrences.

2. It carries with it the possibility of uterine rupture in future gestations.

The uterine scar left by myomectomy, as a rule, withstands the trauma of delivery. Uterine rupture did not occur in any of the cases considered in this paper. In myomectomy in which the uterine wall was damaged

down to the mucosa over an area larger than the palm of the hand, delivery at term was normal. In another case, the tumor was so deeply imbedded that in removing it, the decidua was invaded. Gestation went to term and though labor was long and tedious and forceps were resorted to, a living child was obtained. Some of these myomectomized patients again became pregnant and subsequently went through one, two, three or more normal deliveries. Even if a myomectomy be accompanied by extensive destruction of uterine muscle, gestation may go to term, but the patient should be kept under observation.

### Routes

For the performance of myomectomy, the operator has the choice of two routes, vaginal and abdominal. The vaginal route has a limited field of usefulness. It is the operation of election.

1. In cervical fibroids, interstitial or pedicled, the latter are easier of access when forced downward by the presenting child's head.

2. In long pedicled submucous fibroids of the body protruding through the cervical canal.

3. In fibroid polypi causing lechiometra.

In a word in any case of cervical fibroids, pedunculated or sessile, so situated that their vascular supply can be completely controlled by the operator.

### Contra Indications

The vaginal route is contra-indicated in the presence of—

(a) Disease of the uterine adnexa.  
(b) Of intestinal adhesions to the myoma.

(c) Of malignant changes in the tumor.

(d) Of myoma or myomata that can not be drawn into the vagina.

For Myomectomy as well as for Cesarean Section and Hysterectomy, the abdominal route is preferable, because—

1. It gives the operator a clear view of the operative field.
2. It facilitates the separation of adhesions.
3. It gives full control of bleeding parts.
4. It furnishes better access to tumor or tumors.
8. It enables the operator to adapt the operative procedure to the case in hand.
6. It allows correction of any associated abdominal pathological condition. Grad in his case shelled out three fibroids and removed an ovarian cyst; eight months later, normal pregnancy.

#### Conservatism

Myomectomy, vaginal or abdominal, is a conservative, non-mutilating operation. Though presenting difficulties in interstitial and intraligamentary tumors, it is almost always of easy and rapid execution, presenting few hemostatic difficulties. When feasible, it is the ideal operation for uterine fibroids. The operator must not disregard the pathological fact that a small nodule left behind may grow to a large tumor before the end of pregnancy. Myomectomy is preferred to hysterectomy, abdominal or vaginal, total or supra-vaginal, because

1. In sterile women, the uterus being left intact, conception may follow. Though pregnancies after myomectomies are not frequent, nevertheless, the hope of pregnancy is not illusory.
2. In the pregnant uterus, it removes the cause of the disturbing symptoms and cures the condition. The advantages of leaving the uterus in recently married women are obvious. Especially are conservative

measures indicated in women below 40 years of age whose uteri are not studded with fibroids and who are willing to face the probability of a second operation.

3. It gives gestation the opportunity to continue.
4. It permits the delivery of the child through the natural passages.
5. The post-operative shock is mild, the convalescence short (especially after vaginal myomectomy) and the mortality rate for both mother and child is low.

6. Menstrual and regenerative functions of the mother are retained.

7. The presence of gestation proves the function integrity of the uterus. If after the initial incision, myomectomy is found unsafe, or impossible because the tumor is too large, too adherent, or too deeply imbedded, no harm has been done, and the appropriate operative act may still be performed.

The operative procedure suitable to the individual case, owing to the difficulties of diagnosis is best determined after the exposure of the tumor. The operator may plan to do a myomectomy and perform a hysterectomy.

#### Cesarean Section

As pregnancy approaches its completion, the delivery of a living child becomes a new factor, a new desideratum.

#### Indications for Cesarean Section

In gravid myomatous uteri, Cesarean Section is indicated near or at term in all cases in which delivery through the natural passages

1. Would continue the tumor, thereby predisposing it to infection and degeneration.
2. Would be extremely difficult as in the presence of large or multiple fibroids interfering with uterine contractions.

3. Would be mechanically impossible. Way blocked by a contracted pelvis, scar tissue, etc.

4. Would inflict serious traumatism upon the maternal tissue or in any way endanger the mother's life or future well-being.

5. Would jeopardize the life or health of the child.

Cesarean section for the removal of the dead foetus is explained by co-existence of a flat rachitic pelvis, obstructed by a large tumor.

#### Combined Cesarean Section and Myomectomy

In the course of Cesarean Section on

a myomatous uterus, myomectomy, if feasible, is indicated. The benefits resulting from their removal, far outweigh the risk incident to tumor enucleation or ablation. The mobility and pliability of the recently delivered uterus facilitate access to and control of wounds left by the excised myomata. The strongly retractile state of the uterine wall lessens the hemorrhage of enucleation. After Cesarean Section, the cervix must be patulous; at times, the free escape of lochia is assured only by artificial dilatation of the cervix.

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## BOOK REVIEWS

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**MORRIS'S HUMAN ANATOMY.** A complete systematic treatise by English and American authors. Edited by C. M. Jackson, M. S., M. D. Professor and Director of the department of Anatomy, University of Minnesota. Eleven hundred and sixty-four illustrations, five hundred and fifteen printed in colors. Sixth edition, revised and largely rewritten. Philadelphia; P. Blakison's Son & Co., 1012 Walnut Street. Price \$10.00 net.

Each of the various sections has been thoroughly revised, and some of them entirely rewritten. The previous section on Morphogenesis is now entitled Developmental Anatomy. It has been rewritten by Prof. R. E. Scammon, and its scope extended so as to include both pre-natal and post-natal changes, thus bridging the gap between embryology and adult gross anatomy. The section on Skin and Mammary Gland has been separated from the Glands of Internal Secretion, the former being rewritten by Prof. Charles R. Stockard and the latter by Prof. J. F. Gudernatsch. The spleen, formerly included with ductless glands, was also revised for the present edition by Dr. Gudernatsch, but has been transferred to its more ap-

propriate position under the Lymphatic System. The fourth edition of Morris's Anatomy was the first general text-book of anatomy in English to adopt the BNA. During the past few years the merit of this system of nomenclature has become so widely recognized that it is now very generally accepted among the English-speaking nations. Lack of space forbids the enumeration of the many advantages of this system, not the least of which is the reduction of some 30,000 anatomical terms (including synonyms) to 5000. The comparatively few defects of the BNA will doubtless be remedied by revision. Morris's is a good standard anatomy.

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**UROLOGY.** A Surgical Treatise on Genito-Urinary Diseases Including Syphilis. By Charles H. Chetwood, M. D., LL. D., F. A. C. S. Former Professor of Genito-Urinary Surgery, New York Polyclinic; Visiting Surgeon to Bellevue Hospital; Consulting Urologist, French Hospital; Special Consulting Surgeon to Knickerbocker Hospital, St. John's Hospital, L. I. City), Nassau Hospital (Minola), St. Agnes and White Plains Hospital; Member American Association of Genito-Urinary Surgeons, American Urolog-

ical Association; L'Association Internationale D'Urologie, etc. Profusely illustrated; third edition. New York; William Wood & Company. Price \$8.00.

The principal progress in the urological field has come as a result of more intensive study of cases, individually and in groups, which has entailed greater precision in diagnosis and more careful preparation for operation. The very important department of diagnosis has gained materially through improvement in the manufacture of cystoscopic and roentgenographic equipment and the development of technical skill in its application. In the section of this work assigned to cystoscopy, there is described in detail a cystoscopic-unit-equipment designed by the author. As the result of broadening experience, certain modifications have been made in the department of surgical technic; and finally, conforming to the dictum of American etymology the nomenclature of salvarsan and its various substitutes as embraced in the term *arsphenamin*, has been adopted. We congratulate the author on the appearance of this, the third edition.

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THE INTERNATIONAL MEDICAL ANNUAL. A year book of treatment and practitioner's index. 1921, thirty-ninth year. New York; William Wood & Co. Price \$6.00.

In an address upon "War Lessons for Radiography," Thurstan Holland, after a criticism of War Office methods during the earlier years of the war, discusses the effects of the war on the production of apparatus and the invention of new instruments. He then shows that no great advance had been brought about in radiography from work done during the course of the war, and that even in the localization of foreign bodies nothing more had been done than to elaborate, and in some instances to simplify, pre-existing methods. The greatest effects

of the war are to be found in the fact that all medical officers—that is, the bulk of the medical profession—necessarily saw, and had impressed upon them the enormous value of, X-ray diagnostic work, and (2) that the lay public in the case of the numerous wounded, and the lay staffs, male and female, of war hospitals, had also had this fact brought intimately to their notice. These two facts must necessarily have a great influence on the future of X-ray work. The International Annual is a valuable epitome of medical progress.

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A TREATISE ON CATARACT. By Donald T. Atkinson, M. D. Fellow of the American Academy of Ophthalmology and Oto-laryngology. Life member of the American Medical Association of Vienna; member of the American Medical and National Tuberculosis and the American Social Hygiene Associations. Author of "Great Medical Innovations;" "Adenoids and Kindred Perils of School Life;" "A Social and Economic Consideration of Venereal Diseases (social travesties and what they cost)," etc., etc. With original illustrations. New York; The Vail-Ballou Company, Publishers.

In this little volume the author gives a general resume of the subject of cataract, and places before the reader a synopsis of approved methods for the operation and after-treatment of cataract cases. Careful attention has been given to the technic of each operation, with mention of a number of measures indicated to avoid the accidents common in cataract cases.

Special emphasis has been made of the importance, not only of making a guarded prognosis in advanced cataract, because of the possibility of lesions of the fundus, but also of the necessity of examining the eye grounds and recording the findings in cases seen before the lens is sufficiently cloudy to entirely obscure the field, thereby securing valuable data as a later aid to prognosis.



### The Slanderer

The very name invokes loathing. Though more or less in human form, this degenerate remnant of the silurian age is the most contemptible of creatures. The scandalmonger is dis-

THE ASSESSMENT OF PHYSICAL FITNESS, By Correlation of Vital Capacity and Certain Measurements of the Body. By Georges Dreyer, C. B. E., M. A., M. D., Fellow of Lincoln College, Professor of Pathology in the University of Oxford. In collaboration with George Fulford Hanson. With a Foreword by Charles H. Mayo, M. D., Rochester, Minn. Cloth, Pp. 128, with XXIV tables. Price \$3.50 net. New York; Paul B. Hoeber.

Dr. Dreyer divides all workers into three classes and shows the difference in the physical measurements between Class A and Class B—men who have undergone prolonged physical training, or have an occupation which leads to muscular development, and men of the professional and business classes. Class C contains those who lead an extremely sedentary life, which it can readily be understood makes for a greater degree of under-development than would obtain among those of Class A or B. Hence the new note in a book on physical fitness and one that is inclusive of matters which have been overlooked by other authors, and on account of their neglect have given a one-sided account of the matter.

To quote Dr. Charles Mayo who wrote the Foreword: "The importance of the physical fitness of man has been only partially appreciated in the estimate of prognosis by physicians in the examination of the sick and in the measurement of the lung capacity by examiners for insurance companies. Dr. Georges Dreyer has shown that the estimation of vital capacity is more than a mere test, that it indicates the tendency to health and resistance to disease, and that in a prognosis of life's duration it parallels very closely the results of a general examination."

liked, the liar is despised, but the slanderer is loathed. Using falsehoods or facts that are distorted as some would juggle statistics, the slanderer spreads a most subtle poison, that blasts lives and reputations. Slander can not be controlled any more than you can stop a lie, once it has gained credence. Compared with the social diseases, it is the greatest evil of our age. The slanderer is more dangerous and despicable than those misguided enemies of society who use bombs and poison secretly.

Whenever you discover a slanderer posing as an honorable member of our profession, let your conscience be your guide but be sure you do your full duty.

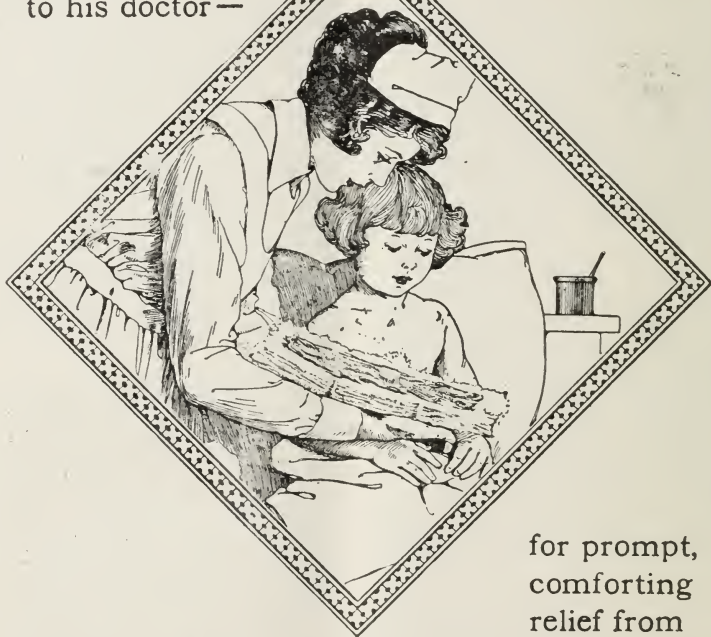
The following have been chosen as directors of the proposed Hollywood Hospital: Dr. Edwin O. Palmer, president; Dr. Foster K. Collins, secretary; Dr. Sharon M. Atkins, treasurer. Other board members are: Dr. L. J. Huff, Dr. Walter E. Deering, Charles Warner and Dr. Albert Soiland. The initiatory movement for a Hollywood hospital was made more than a year ago by Dr. Atkins, the project being held up on account of opposition of residents with pretentious homes in the proposed hospital district above mentioned.

The Los Angeles County Medical Association held a most successful meeting October 6 at the Virginia Hotel, Long Beach. Physicians and surgeons of the Pacific Fleet, Submarine Base and Fort McArthur, were the guests of honor. Dr. Walter V. Brem was toast master at the banquet in the evening.

The Southern California Homeopathic Medical Society held a two-days' meeting in Los Angeles, October 12-14. They propose to erect a hospital at an early date.

# A CHILD'S GRATITUDE

to his doctor—



for prompt,  
comforting  
relief from

the terrifying dyspnoea of Croup, or the cutting, burning pain of Tonsilitis, tends to increase the pleasure as well as profit in following the Healing Art.



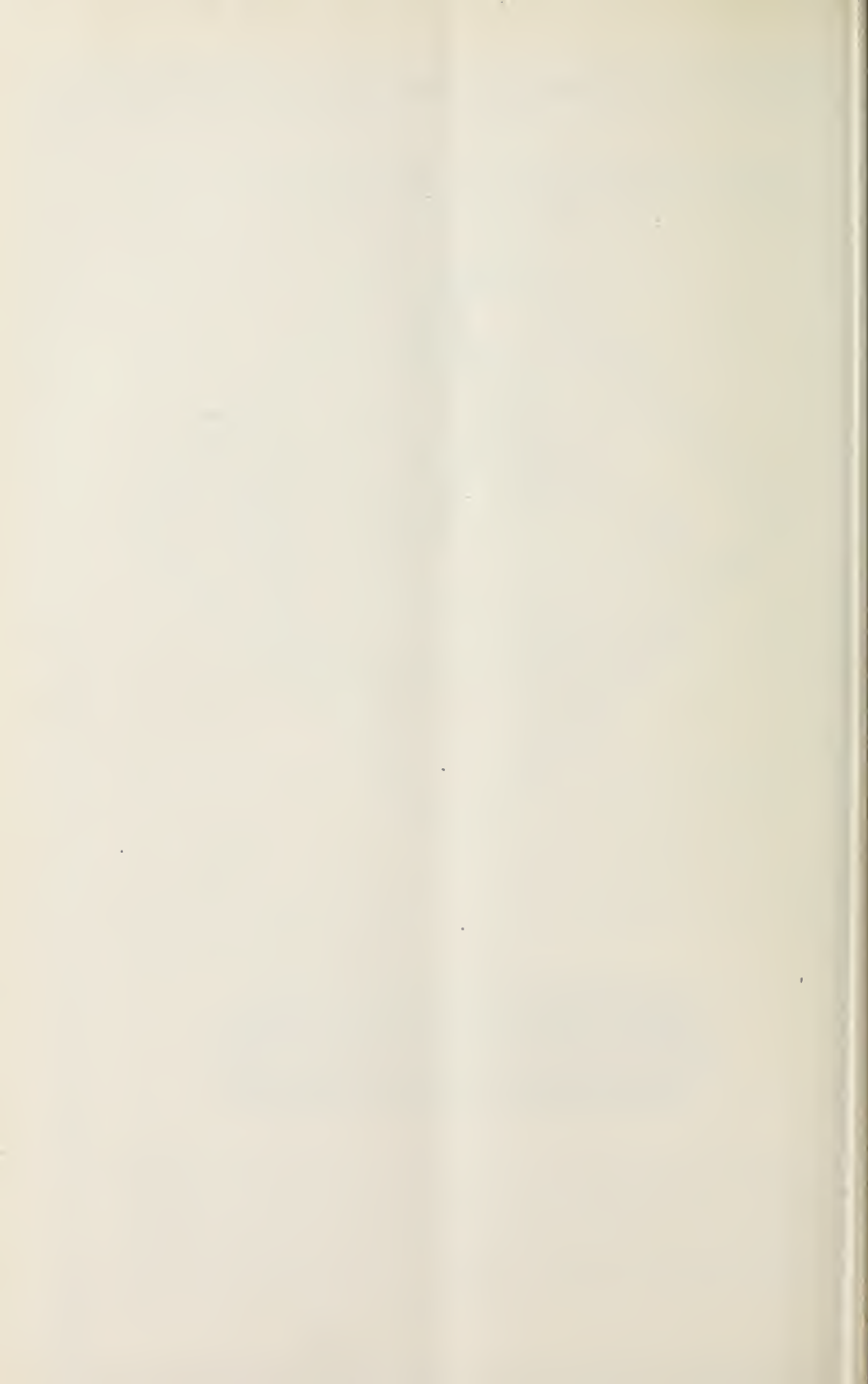
applied as hot as can be borne—quickly relieves the congestion by increasing the superficial circulation promoting relaxation of spasm—free respiration and comfort to the little patient, indescribable in words, but amply apparent to the Medical Man in a grateful, confiding smile.

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## SECRETARY

## MEETING

ex. R. Craig, 535 N. Dearborn St., Chicago.....	St. Louis, May 22-25, 1922
E. Musgrove, 135 Stockton St., San Francisco.....	Yosemite Nat. Park, May 15-18, 1922
F. Harbridge, Goodrich Bldg., Phoenix.....	Prescott, 1922, date to be announced
Grace J. Brown, Goldfield.....	Reno, Sept., 1922
E. Tull, Albuquerque.....	To be announced
Shoemaker, 605 Marsh-Strong Bldg.....	As announced
First and Third Thursday Evening	
B. Worthington, 1230 First Nat. Bank Bldg.....	As announced
Second and Fourth Tuesday Evening	
H. Eaton, 231 Invest. Bldg., Pomona.....	Pomona Valley Hospital
Third Tuesday Evening	
A. Rosenkranz, 1024 Story Bldg., Los Angeles.....	Los Angeles, Nov. 16-17-1921
J. Eyttinge, 118 Cajon St., Redlands.....	San Bernardino, First Tuesday Evening
William Duffield, 516 Auditorium Bldg., Los Angeles.....	Los Angeles, Nov. 4-5-1921
Scar Reiss, 602 Brockman Bldg., Los Angeles.....	As announced
First Monday of January, March, May, September and November	
H. Williams, 1501 So. Figueroa St.....	Second Tuesday Evening
S. Granger, 801 Brockman Bldg., Los Angeles.....	As announced
Fourth Thursday Evening	
H. Brownfield, 809 Haas Bldg., Los Angeles.....	1501 South Figueroa St.
Second Wednesday Evening	
W. Chaffin, 910 Hollingsworth Bldg., Los Angeles.....	County Hospital
Second Friday Evening	
S. Ray, 628 Van Nuys Bldg., Los Angeles.....	As announced
Last Wednesday Evening	
G. Carter, 845 W. Tenth St., Los Angeles.....	As announced—Third Wednesday Evening
E. Gallant, 632 Van Nuys Bldg., Los Angeles.....	As announced
First Monday of January, March, May, September and November	
Leonor Seymour, 308 Consolidated Realty Bldg., Los Angeles.....	308 Cons. Realty Bldg.
First Tuesday Evening	
von Wedelstaedt, 1113 E. 4th St., Long Beach.....	Second Tuesday and Fourth Friday
Caroline McQuiston-Leete, Dodworth Bldg., Pasadena.....	Second Tuesday
A. Sands, Pier Ave. and Trolleyway, Ocean Park.....	First Monday
G. Butt, 100 S. Pacific, Redondo.....	First Wednesday
R. Rogers, 212 Hamburger Bldg., Los Angeles.....	First Tuesday
H. McKellar, 618 Title Insurance Bldg., Los Angeles.....	First Monday
Samuel Agnes, 1015 Brockman Bldg., Los Angeles.....	First Tuesday at 9:00 A. M.
Samuel Ayres, 1015 Brockman Bldg., Los Angeles.....	First Tuesday at 9:00 A. M.









DR. A. J. SCOTT, SR.

PHOTO BY HUTCHINGS, L. A.

# SOUTHERN CALIFORNIA PRACTITIONER

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LOS ANGELES, NOVEMBER, 1921

No. 11

Editor:

DR. GEO. E. MALSBARV

Associate Editors:

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Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton,  
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Dr. Olga McNeile, Dr. W. H. Dudley, Dr. J. M. Mathews  
Dr. G. F. Boehme, Jr.

## CARDIAC IRREGULARITIES \*

By E. Avery Newton, M. D., F. A. C. P., Los Angeles

The normal heart beat of all mammals originates in the sino-auricular node, situated at the junction of the right auricle and superior vena cava. The stimulus arising in this location passes down over the auricles causing them to contract, and then passes from auricles to ventricles through the auriculo-ventricular bundle or Bundle of His, then through the arborizations of this bundle in the right and left ventricles stimulating them and producing ventricular contractions.

The normal time of the stimulus in passing from auricles to ventricles is 17 to 20 one-hundredths of a second. When a stimulation arises in any other area of the heart than the sino-auricular node and produces a cardiac contraction, this contraction is irregular in rate and causes what is termed a cardiac irregularity.

The cardiac irregularities are: Sinus

Arythmia, ventricular extrasystolies, auricular fibrillation, auricular flutter, paroxysmal tachycardia, heart block and pulsus alternans.

### Sinus Arythmia

Sinus Arythmia is an unstable irritability of the sino-auricular node. Several related heart irregularities are due to variations in the rate at which the impulses are generated in the sino-auricular node. A very notable example is the irregularity associated with respiration, in which there is a gradual increase of heart rate during inspiration and a marked showing of the heart rate during expiration. In young persons, this is a common condition. There are also in early life, irregularities in which the whole heart is involved and in which there is no constant relation to breathing. These irregularities are considered by many to be a normal condition of youth. I believe they show a

\*Read before the San Bernardino County Medical Society, November 1, 1921.

lowered vitality, probably caused by vagal disturbance due to some toxic condition of the system, either faulty metabolism, retention of waste matter in the body from improper food or following some infection. The irregularities of sinusal origin are usually easy to diagnose. Most irregularities of childhood are of sinusal origin and nearly all of these are associated with respiration. The irregularities are in time elapsing between heart beats, only there is no disturbance of auricular ventricular relationship. They disappear nearly always on exertion or on a slight rise in temperature or by any condition that will increase the pulse rate and usually soon after administering a small dose of atropine.

#### Ventricular Extrasystolies

Ventricular extrasystolies are responsible for by far the most irregularities of the heart, especially the so-called "missing of a beat," patients so often tell you about. They occur at very irregular intervals, as often as every second beat and at irregular intervals up to one in five hundred or even more. Unless they occur often, they give very little discomfort except to patients who will count their own pulse. Some of these patients become very much alarmed at this condition. Extrasystolies are next in order to sinus arrhythmia in being of any seriousness.

Extrasystolies occur mostly in people who eat rather heartily, especially an over amount of protein and who do not exercise or are constipated. In most cases they disappear after a good physic or on exertion. I have a physician under my care whose work is mostly in the office, who has extrasystolies for about ten months of the year. When the hunting season opens he does a lot of walking and the extrasystolies entirely disappear. In my experience, they occur in all cases fol-

lowing an acute cardiac dilation, the muscle of the ventricle being more easily irritated following the stretching or tearing or both, due to a dilatation. The same tissues in the ventricles which are capable of originating a stimulus that will cause a ventricular contraction when the auriculo-ventricular bundle is destroyed as in heart block, are the ones that are irritated and produce extrasystolies.

Ventricular extrasystolies occur immediately after a normal contraction before the ventricles have filled with blood so there is no pulse beat following an extrasystole. The contraction of the auricles occurs during the time the heart muscle is contracting in response to a stimulus originating in the ventricle. So there is no response of the ventricles to this auricular contraction as the muscle will not respond to another stimulus while contracting following one stimulus, even though the second stimulus be much stronger than the one being responded to. We therefore have an absolute dropping of the pulse beat by palpation. By auscultation we hear a contraction sound following immediately the second sound of the heart, this followed by a pause, the next heart sound following the auricular contraction next after the one that there was no response to owing to the heart muscle being in contraction. Regardless of their form of origin, they are almost harmless and are only to be diagnosed to exclude some serious conditions such as heart block, fibrillation or pulsus alternans.

#### Auricular Fibrillation

In auricular fibrillation, there is a condition in which co-ordinate contractions of the auricles have ceased. The auricles are in complete dilation so do not perform their normal function of propelling blood into the ventricles. There is a constant twitching all over



the auricular surface. Electrocardiograms show the rate of auricular contractions to be at from 400 to 600 per minute. This condition is important owing to the frequency of its occurrence, ease of diagnosis, prostration of the patient, and its yielding to treatment.

For many years it was known as *pulsus irregularis perpetuus*. An electrocardiogram shows it at once, there being the frequent contractions of the auricles and the irregularity of the ventricular contractions, no two in a hundred being at the same rate. The sphygmograph shows the constant irregularities of ventricular contractions and by palpation if the pulse rate is not too rapid, which it usually is not, it is easy to detect the marked irregularities of rate.

#### Auricular Flutter

In auricular flutter there is an accelerated condition of the auricle in which they contract at the rate of 200 to 300 per minute, this rate being more rapid than the ventricles can respond to. They usually contract to the stimulus from every 2nd or 3rd auricular contraction or any rate of response may occur.

Auricular contractions may occur at such a rate that we have an auricular contraction occurring between the one the ventricles are responding to and the ventricular contraction.

This condition as also fibrillation and tachycardia, occur mostly in old people in whom there is a myocardial degeneration or nutritional disturbances or toxemias like those following typhoid, pneumonia, influenza, et cetera.

If the heart is markedly degenerated, we are apt to have associated cardiac dilation, engorgement of the liver and dropsy. If the heart is not decompensated, very little or no embarrassment may be felt. Usually,

however, we have inability of the patient to maintain any work that requires effort, also frequent attacks of tachycardia.

The response to treatment is the best guide to prognosis.

#### Heart Block

Heart block is partial or complete disassociation of the auricles and ventricles.

In partial heart block there is an occasional prolongation of the time it takes the impulse arising in the sino auricular node to reach the ventricles, there being regular auricular contractions to some of which there is no ventricular response.

Partial heart block is of much clinical importance, when continued for a long time it warns of myocardial degeneration; when occurring for only a short time of poisoning or an acute heart lesion; when in conditions such as rheumatic fever, cholecystitis, cystitis or any chronic infection, the heart drops an occasional beat and it is found to be partial heart block, it is a sure sign that the heart is being invaded by bacterial organisms or their products and heroic treatment must be given.

Complete heart block is absolute disassociation of auricles and ventricles, each having their own rhythm. The auricles maintain their usual rate of 66 to 80 per minute, while the ventricles take on a rhythm of their own from stimulus originating within themselves. The rate is usually from 30 to 40 per minute. If the ventricles did not contain within themselves some areas of primary cardiac tissue, in which stimulus sufficient to stimulate contractions could and do originate, death would instantly follow the destruction of the auriculo-ventricular bundle, as the ventricles would cease their functioning immediately upon the destruction of the auriculo-ventri-

cular bundle unless they contained the tissue capable of originating stimuli.

### Paroxysmal Tachycardia

Paroxysmal Tachycardia, until quite recently, or since the use of the electrocardiogram, was thought to be due to only a very slight disturbance of cardiac innervation. Cardiograms, however, show that the impulses originate outside of the normal area or sino auricular node, usually in the auricles. In rapid heart action following exertion in normal persons the heart beats originate in the physiological area and are only more frequent.

### Pulsus Alternans

In pulsus alternans, we have a regular rate of heart contractions. Every other beat is less forceful than the one preceding. This condition is very apparent by palpation of the radial artery also by sphygmographic tracings. The electrocardiogram does not demonstrate any alteration in the curves,

thus showing that the electromotive force generated by the heart muscles is the same even though there is such a marked difference in the pulse. Whenever this condition is found, there is reason to believe that the heart has been previously damaged or is meeting an extraordinary demand for work.

Alternations of the pulse or heart have to be regarded as serious. They are only present, be they functional or structural, when the heart muscle is in a dangerous condition. Rarely in cases of pulsus alternans we have a rise in blood pressure and change in heart rate which seems to accompany a betterment in the patient. This is very, very rare, however. While the exact cause of this condition is still unknown, we are aware that it indicates a heart that is very much embarrassed, either on account of some defect in the heart itself, or from the strenuous effort it is called upon to

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"It seemed a most distressing affair indeed. The attending physician put the patient in an ice pack at once. She grew rapidly worse. I was called for consultation, but the patient died before I could reach her—and right here I wish to ask, does the profession generally, believe in the use of ice packs in pneumonia?" Read this timely inquiry and the answer along with other short and interesting articles in the November BLOODLESS PHLEBOTOMIST.

This publication has been mailed to every English-speaking physician with a known address.

If you did not receive a copy, address:

THE DENVER CHEMICAL MANUFACTURING COMPANY  
New York, U. S. A.

### First Scientific Meeting

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The Pacific Coast Association of Anesthetists will hold its first Scientific Meeting in Yosemite Park, Monday and Tuesday, May 15-16, 1922, in conjunction with the meeting of the Section on Anesthesiology of the California State Medical Society. Membership is open to all licensed and qualified members of the medical and dental professions, as well as to research workers holding doctorates of similar standing, who are interested in advancing the specialty of anesthesia.

# SOUTHERN CALIFORNIA PRACTITIONER

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This journal endeavors to mirror the progress of the profession of California and Arizona

Established in 1886 by Walter Lindley, M. D., LL. D.

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## EDITORIAL

### CANCER

Dr. Walter M. Dickie, Executive Officer of the California State Board of Health, has issued the following vital facts about cancer:

1. Cancer is now killing one out of every ten persons over forty years of age.
2. Many of these deaths are preventable, since cancer is frequently curable, if recognized and properly treated in its early stages.
3. Cancer begins as a small local growth which can often be entirely removed by competent surgical treatment, or, in certain external forms, by using radium, X-ray or other methods.
4. Cancer is not a constitutional or "blood" disease; there should be no thought of disgrace or of "hereditary taint" about it.
5. Cancer is not a communicable disease. It is not possible to "catch" cancer from one who has it.
6. Cancer is not inherited. Cancer is so frequent that simply by the law of chance there may be many cases in some families.
7. The beginning of cancer is usually painless; for this reason its insidious onset is frequently overlooked, and is too easily neglected.
8. Every persisting lump in the breast is a warning sign. All such lumps are by no means cancer, but even innocent tumors of the breast may turn into cancer if neglected.
9. In women continued unusual discharge or bleeding requires the immediate advice of a competent doctor.
10. Any sore that does not heal, particularly about the mouth, lips, or

tongue, is a danger signal. Picking and irritating such sores, cracks, ulcerations, etc., or treating these skin conditions by home remedies, pastes, poultices, caustics, etc., is playing with fire. Warty growths, moles, or other birthmarks, especially those subject to constant irritation, should be attended to.

11. Persistent indigestion in middle life calls for thorough and competent medical advice.
12. Radium is a useful and promising means of treatment for some kinds of cancer in the hands of the few skillful surgeons and hospitals possessing sufficient quantity of this rare and very expensive substance; it must not be thought of as a cure-all for every form of cancer. No medicine will cure cancer. Doctors and institutions which advertise "cures with-

out the knife" play upon the patient's fear of operation in a way that leads too often to the loss of precious time, and fatal delay in seeking competent treatment. Go first to your family physician.

13. The common belief that cancer is a hopeless malady is partly due to the fact that cases of successful treatment are frequently concealed by the patient and his family, while cases of failure (too often resulting from delay) are apt to become common knowledge. It should be noted that the cancer death rate in 1906 was 73.8 per 100,000 population while the tuberculosis death rate was 218.0 per 100,000 population; in 1920 the death rate for tuberculosis had fallen to 155.0 per 100,000 while the cancer death rate had risen to 108.6.

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## EDITORIAL NOTES

At a recent meeting of the Los Angeles County Medical Association the following resolution was adopted: "We, as representatives of the Medical Profession of the city and county of Los Angeles, go on record as absolutely opposed to the prescribing of alcoholic liquors for other than strictly therapeutic purposes and we are opposed to any doctor's prescribing said liquors except after a thorough personal physical examination of the patient, said examination to be made at each and every time such a prescription is written and by the doctor himself. Any member of this society who may violate this rule shall render himself liable to trial and expulsion from the society for unethical conduct."

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Dr. E. Guy Halbott, 1437 Casa Grande street, Pasadena, a member of

the Near East Commission, returned to his home recently after a trip abroad.

During his trip, Dr. Talbott visited ten countries, including Greece, Turkey, Georgia, Armenia, Bulgaria, Italy, Switzerland, France and England. He spent a month in Turkey and a month in the Russian Caucasus.

"Most of the trip was like a horrible nightmare to me," Dr. Talbott said in relating his experiences. "I never imagined that human suffering and despair could be so terrible. I saw little children roaming the streets in search of something to eat among the refuse piles. I saw hundreds of famished and starved children lifting up their hands in pleading to America. America is their only help, and Americans will not fail them."



Dr. C. F. Brown, surgeon at the San Pedro receiving hospital, has resigned in order to accept the position of medical missionary in the province of Hunan, China.

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Announcement of the appointment of Dr. Anna Hohanshelt, daughter of the Rev. W. G. Hohanshelt, of Monrovia, as resident physician of Olive View Tuberculosis Sanatorium, is made by the State Board of Control.

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Dr. Franklin R. Nazum, who is Medical Director of the Santa Barbara Cottage Hospital, is back from a several weeks' trip in the East.

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Dr. C. S. Stoddard, the Dean of the medical profession in Santa Barbara, was married October 5th to Mrs. Agnes E. Pease of Long Beach. Mrs. Pease is well known in G. A. R. and W. R. C. circles, being a past department president of the Women's Relief Corps for California and Nevada, and has many friends in that order.

Dr. Stoddard, a well known physician and veteran of the civil war, for some time has been medical officer of the California and Nevada department of the G. A. R.

Dr. and Mrs. Stoddard will be at home to their friends after November 1, at 1215 Anacapa street.

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Dr. J. K. Swindt and Dr. Paul Newcomer of Pomona, are spending a few weeks in Eastern clinics.

The Long Beach Sanatorium was sold recently by Dr. Abbie W. Simpson to Dr. T. O. Boyd, who recently sold the Boyd Sanatorium in Twin Falls, Idaho, and Dr. Jerrold A. Stern, who has been managing hospitals in the East and Middle West for several years. The price paid was \$150,000.

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The Los Angeles Times under an

excellent picture in military uniform of Major R. E. Skeel, says:

The signal honor of being chosen president of the American Association of Obstetricians, Gynecologists and Abdominal Surgeons has been accorded Maj. R. E. Skeel, A. M., M. S., F. A. C. S., of Los Angeles, it was learned recently.

The election to the high post among the country's most famous specialists is regarded as recognition of Dr. Skeel's standing in the profession. He is regarded as one of the foremost surgeons of the country and also is prominently identified in club life here, being a member of the Athletic Club and the Uplifters.

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Governor Stephens has reappointed, for four year terms, five members of the State Board of medical examiners, which is meeting here this week. The members reappointed are Dr. P. T. Phillips, Santa Cruz, president of the board; Dr. C. B. Pinkham, San Francisco, secretary; Dr. H. E. Alderson, San Francisco; and Dr. W. R. Moloney and Dr. R. A. Campbell of Los Angeles. The Governor has yet to appoint a successor to Dr. Alfred J. Scott of Los Angeles, who dropped dead in the Capital Sunday morning.

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Dr. and Mrs. Warren Franklin Fox, and son Robert Bradford, arrived in Pasadena recently from Galveston, Texas.

They made the trip by automobile, taking eighteen days, going by way of Waco, Fort Worth, Amarillo, Magdalena, Flagstaff, Oatman, Barstow to San Bernardino. Several days were spent at the Grand Canyon.

In general they reported the roads rough, particularly so on the Santa Fe Trail. They made the trip of 2,121 miles without any serious trouble and without a puncture.

Dr. Fox is a passed assistant surgeon in the regular corps of the United States Public Health Service and is now on four months leave of absence preparatory to resigning from the federal service.

He is not a stranger to Southern California, having lived in Pasadena at one time and being a graduate of the medical department of the University of Southern California, class of 1913. Soon after graduation he entered the Public Health Service and has had various details.

He has been stationed at the Marine Hospital, San Francisco; surgeon on the United States Coast Guard Cutter "Unalga," boarding officer at the New Orleans Quarantine Station, and for the past three and a half years at Galveston, Tex.

He is a son of Dr. and Mrs. J. I.

Fox, 786 Sunset avenue, and a brother of Dr. Bradford Fox. He plans to engage in private practice in Pasadena and vicinity.

At a recent meeting of the Riverside County Medical Society, Dr. C. T. Dillon of Los Angeles, spoke on Hospital Standardization, Dr. C. Von Zwahlenburg spoke on the Riverside Community Hospital and Dr. A. L. Bramkamp of Banning, was host at a buffet supper.

At the annual meeting held October 4th, Dr. E. J. Eytinge of Redlands was elected secretary and treasurer of the San Bernardino County Medical Society. Dr. J. A. Shreck was made a vice-president; Dr. W. D. Lenker, vice-president, and Dr. L. M. Coy, president.

## ABSTRACTS FROM RECENT MEDICAL AND PUBLIC HEALTH PAPERS

Edited by Assistant Surgeon General C. C. Pierce, U. S. Public Health Service, 16 Seventh Street, S. W., Washington.

### I. LABORATORY RESEARCH

A Consideration of Arsphenamine and Certain other Organic Arsenic Compounds in the Treatment of Syphilis. Roth summarizes:

1. There is a well-marked individual variation in the susceptibility of animals to both arsphenamine and neoarsphenamine.

2. Neoarsphenamine is so unlike arsphenamine in its biological behavior that it should not be regarded as arsphenamine in a form convenient for administration.

3. Acid solutions of arsphenamine are at least two to four times as toxic as properly alkalized solutions, the toxicity increasing directly with the concentration.

4. The toxicity of properly alkalized solutions of arsphenamine is

slightly less toxic as a 0.3 per cent than as a 2 per cent solution.

5. The Ehrlich method of alkalizing arsphenamine, in which the monosodium salt is formed, produces a more toxic solution than the present method used in the United States, in which the disodium salt is formed.

6. The use of impure sodium hydroxide should be avoided in making arsphenamine solutions.

7. Increasing the rate of injection of properly alkalized arsphenamine greatly increases its toxicity.

8. Properly alkalized arsphenamine solutions in many cases are more highly toxic immediately after their preparation than after the lapse of about 20 minutes.

9. Shaking alkaline aqueous solutions of arsphenamine and aqueous solutions of neoarsphenamine in the

presence of air increases their toxicity markedly.

10. Neoarsphenamine is a relatively unstable compound in sealed ampule and after an indefinite period may show changes in (1) color, (2) mobility in ampule, (3) solubility, (4) toxicity, and (5) odor.

11. Difficultly or incompletely soluble preparations of neoarsphenamine may be highly toxic and should not be used clinically.

12. In some cases neoarsphenamine in ampule may be rendered insoluble by incubation at 37° C. for about a year.

The margin of safety between the therapeutic and lethal dose of arsphenamine is extremely narrow and this makes it necessary to regard arsphenamine as a potentially dangerous therapeutic agent, even though every precaution is taken to handle it properly. (George B. Roth, Public Health Reports, August 19, 1921.)

**Experimental Observations upon the Effect of Cholesteremia on the Results of the Wassermann Test.** Craig and Williams experiment to find whether amounts of cholesterol in the blood will produce a positive Wassermann as is claimed by several investigators. Rabbits used for the experiment were fed cholesterol for 18 days. There was a persistently negative Wassermann. Authors conclude that there is no relationship between the cholesterol content of the blood serum of rabbits and the results of the Wassermann test. References. (Charles F. Craig and William C. Williams, American Journal of Syphilis, July, 1921.)

## II. DIAGNOSIS

**Studies Concerning the Influence of Arsenical Preparations on Cutaneous Tests.** Strickler concludes:

1. The repetition of a luetin test in nonsyphilitic patients is capable of producing positive luetin tests in

about 21 per cent of our subjects.

2. The intravenous administration of arsphenamin apparently stimulates the production of luetin test in non-syphilitic patients, and in our series we were able to produce 53 per cent positive luetin tests following the form of intravenous specific therapy.

3. In our experience the intravenous administration of cacodylate of soda acts in the same manner as arsphenamin, only more feebly.

4. The repetition of the tuberculin (von Pirquet) test may produce a positive finding, but very infrequently, occurring only once in our series of fourteen subjects.

5. The intravenous administration of arsphenamin is capable of producing a positive tuberculin (von Pirquet) test, previously negative. This occurred in three instances in our series of ten patients.

6. The anaphylactic food test made by either the endermic or scratch method does not seem to be influenced by the intravenous administration of either arsphenamin or cacodylate of soda. Our investigation of this phase of the problem is, however, not yet complete.

7. We are now engaged in studying the effect of the arsenicals given by mouth on the luetin, tuberculin and anaphylactic food tests. (Albert Strickler, Archives of Dermatology and Syphilology, August, 1921.)

**Luetin.** Ward concludes that the complement fixation and the luetin test should be made simultaneously in every suspected case of syphilis. Reviews the literature and presents report of investigations conducted at the Detroit Board of Health Venereal Clinic for Men. (Herbert C. Ward, American Journal of Syphilis, July, 1921.)

**The Diagnosis of Syphilis.** Hazen makes many valuable suggestions

helpful in establishing a correct diagnosis. Author notes unreliability of the Wassermann, emphasizes need of complete physical examination. Other laboratory tests mentioned. (H. H. Hazen, *American Journal of Syphilis*, July, 1921.)

**Spontaneous Variations in the Wassermann Reaction.** Thaysen applied the Wassermann test repeatedly to 66 persons during the course of a year or more. All had been under prolonged observation for many years; syphilis was known in 23. The conditions and the technic were scrupulously alike in all the tests, and yet the reactions showed a wide range from negative to positive or dubious, with fluctuations from time to time. The closest analysis failed to reveal any causes for the variations in the responses. Author states Craig's communication in the *Journal*, March 10, 1917, is the only report of similar research which the author has been able to find in literature. (T. E. Hess Thaysen, *Acta Medica Scandinavica*, Stockholm, June 17, 1921; *Journal A. M. A.*, August 27, 1921.)

**Spinal Puncture in Diagnosis and Treatment.** Bastron, reviewing the opinions of syphilographers on the value of spinal puncture, finds that many agree that it is of great diagnostic value in early syphilis; that in late neurosyphilis the diagnostic value is beyond question; and that authorities are practically unanimous in urging that no case of syphilis be discharged as cured without one or more spinal fluid examinations.

The status of intraspinal therapy in neurosyphilis is still uncertain; and the curative value of spinal drainage is disputed. References. (Carl H. Bastron, *American Journal of Syphilis*, July, 1921.)

**Complement-Fixation Tests with Two Antigens.** Larkin compares re-

sults of a series of tests for syphilis with two antigens. Tests were made in laboratory of the Washington State Board of Health. Results are tabulated. Author concludes that two antigens (in these tests a crude alcoholic extract and a cholesterinized extract were used) form a valuable check one upon the other. Cholesterinized antigen gave a higher percentage of positive and doubtful reactions. Used in connection with the crude alcoholic antigen it is of great value in detecting slight reactions in tested cases where further treatment is indicated. (Mae E. Larkin, *American Journal of Syphilis*, July, 1921.)

**Critical Review: Notes on the Wassermann Reaction.** (From the Bacteriological Laboratory University of St. Andrews, University College, Dundee). An account of the evolution and present position of the Wassermann reaction designed to make as plain as possible to practitioners of medicine the principles upon which this test is based. (W. J. Tulloch, *Edinburgh Medical Journal*, July, 1921.)

### III. TREATMENT

**A Review of the Literature and a Discussion of Silver Arsphenamin.** Michelsea and Siperstein review the literature, which is confined to the German. Silver arsphenamin was suggested by Ehrlich, and finally elaborated by Kolle. The drug was first used clinically in March, 1918. Results of investigation by Kolle, Fabry, Galewsky, Gennerich, Hahn, and many others are given. Authors conclude, after a careful survey of the literature and as a result of a limited personal use (250 ampules). "We feel that we may safely state that silver arsphenamin is an efficient spirocheticide, which has a pronounced effect on the visible lesions of syphilis." The consensus of opinion of the many observers is that in the majority of cases of



fresh syphilis a positive reaction becomes negative after the first course of from six to ten injections of silver arsphenamin.

There is considerable variation in the dosage. An initial dose of from 0.05 to 0.1 gm. for a person of average weight is best—with a routine dose of from 0.2 to 0.25 gm. Authors recommend technic: Dissolve the necessary dose in 10 c. c. of sterile distilled water, draw into a 20 c. c. Luer syringe, make venipuncture, aspirate about 10 c. c. of blood, and reinject the entire solution slowly.

One of the distinct advantages is the absence of the odor which characterizes the other arsphenamins. This odor has made it impossible, or at least impracticable, to administer arsphenamin to certain patients.

There is no difficulty in determining the oxidized product. A spoiled product has a dull, muddy, grayish brown appearance, instead of the rather sparkling, clear, dark brown solution.

The interval of choice is from four to seven days, and the number of doses in a course varies greatly.

The majority of observers are not in favor of using silver arsphenamin and mercury simultaneously.

There is apparently no reaction due to silver arsphenamin which is peculiar to that drug and has not been noticed with any of the arsphenamin group, with the possible exception of argyria.

Silver arsphenamin is a more complex salt than any of the other arsphenamins and the physician must be on the alert for the slightest sign of intolerance.

Although the drug has been highly recommended by neurologists, nothing conclusive has been published indicating a selective action of neurosyphilis. (H. E. Michelson and David M. Siperstein, *Archives of Dermatology and Syphilology*, August, 1921.)

**A New Treatment for Syphilis.** Drs. Levaditi and Sezerac of the Pasteur Institute presented a communication to the Academy of Sciences concerning the use of a new substance in the treatment of syphilis; namely, potassium sodium bismuthate. This substance is still in the experimental stage. Intravenous injections of a watery solution of this compound were made in three syphilitic rabbits. The following day no spirochetes could be found in the blood. No recurrence four months later. A prompt cure of the primary symptoms of syphilis in man has been brought about, also the disappearance of the spirochetes from the blood. But no final conclusions, the author states, can yet be drawn from these experiments for several years. (Paris Letter, *Journal A. M. A.*, July 23, 1921.)

**A Valuable Method of Treatment in Selected Cases of Syphilis.** Guy gives details of intensive course of treatment. It is essential that the patient be a young and vigorous adult in first class physical condition. Uses arsphenamine and salicylate of mercury. (W. H. Guy, *American Journal of Syphilis*, July, 1921.)

**Experience with Sodium Arsphenamin (Diarsenol).** Michelson and Siperstein review the literature which is confined to the German, with the exception of one preliminary report by Wright and Michelson. Authors give results of their observations. A total of 545 injections was made on sixty-six patients (twenty-two with primary syphilis, thirty with secondary syphilis, nine with tertiary syphilis, and five with neurosyphilis). All patients showed active lesions or symptoms of syphilis when sodium arsphenamin therapy was instituted.

All of the injections were made intravenously with a Luer syringe of 10 c. c. capacity. Drug was dissolved in

sterile, freshly distilled water. Drug was used in three ways: (a) Three doses (from 0.45 to 0.6 gm.) were given at twenty-four or forty-eight hour intervals, followed by twelve mercuric salicylate (0.5 c. c.) injections. (b) Eight doses (0.54 gm.) were given at three day intervals; no mercury was used in this group. (c) A weekly dose (0.6 gm.) was given for periods varying from eight to twelve weeks. Mercury was not used in this group either. No severe reactions were encountered resulting from injections of sodium arsphenamin. There were few retarded reactions, there was no case of jaundice. Dermatitis was noted twice, once rather severe, but not severe enough to result in an exfoliative dermatitis. Two patients who gave dermal reactions to neo-arsphenamin also gave dermal reactions to minute doses of sodium arsphenamin. Gives report of five of the cases. Authors conclude:

1. Sodium arsphenamin is a readily soluble, easily administered and safe preparation.

2. Sodium arsphenamin exerts a marked influence on clinical manifestations of syphilis.

3. Courses of sodium arsphenamin should be supplemented with mercury.

4. Therapeutic efficiency is apparently equal to that of the other arsphenamins (clinically.)

5. The effect on the Wasserman reaction is about on a par with that of the other arsphenamins. (Henry E. Michelson and David M. Siperstein, *Archives of Dermatology and Syphilology*, August, 1921.)

**Administration of Neosalvarsan.** Bostick discusses the chief danger and difficulties in giving neosalvarsan, which are:

1. The drug is contaminated by air in an imperfectly sealed tube and becomes oxidized or altered;

2. The drug becomes oxidized or altered prior to administration after ampule is opened;

3. The solution is not delivered into the venous circulation.

Author gives in detail methods by which these difficulties may be overcome. The greater part of the article is devoted to the problem of introduction of the drug into the vein. (J. B. Bostick, *United States Naval Medical Bulletin*, July, 1921.)

**Paresis Treatment by Arsphenamine and Mercury.** Bonner reports investigation covering a two-year period made at the Warren State Hospital, Pennsylvania. Weekly treatments were given twenty-eight males diagnosed general paresis, beginning with 0.3 gm. arsphenamine, to the maximum 0.6 gm. Each case also received, for one month, potassium iodide in a dosage of thirty grains per day.

The Wasserman reaction was influenced but little in the purely parietic types, even with the most intensive treatment.

Author summarizes: (1) Course of duration of bedridden stage seems lessened by treatment, and dying patients in this stage do not linger so long in usual wretched state. (2) Duration of ward life seems lengthened. (3) Results do not warrant a change in prognosis. (Clarence A. Bonner, *Boston Medical and Surgical Journal*, July 14, 1921.)

**Interim Report of the Neurosyphilitic Investigation of the Massachusetts Commission on Mental Diseases,** by Oscar Raeder, M.D., *Bulletin of the Massachusetts Department of Mental Diseases*. Vol. IV, No. 2, April, 1920. Author concludes, in 428 cases of neurosyphilis treated during a period of four years, 129 cases, or 30 per cent, showed definite benefit; 125 cases are under treatment at hospitals, of which a certain percentage can be expected

to show similar improvement. Among 93 cases that have drifted away, another definite proportion can be presumed to have benefited from treatment. There are two definite groups of cases of neurosyphilis, the early, or psychopathic hospital group, and the advanced committable or custodial group. The early case is not met in insane hospitals, except in those which conduct out-patient departments. These cases frequently come to professional attention through the field of general medicine. Early diagnosis gives the greatest promise of successful results, however, there is a distinct, though not large, percentage of advanced cases which yield to intensive treatment. (Boston Medical and Surgical Journal, July 21, 1921.)

**To Ward Off Accidents in Arsphenamin Treatment.** These phenomena seem to be the manifestation of an upset in the colloidal balance in the blood serum with resulting flocculation. The most successful and harmless measure to ward off this, Cheinisse says in Sicard's preliminary injection of 30 c. c. of physiologic saline containing 0.6 or 0.75 gm. of sodium carbonate. The arsenical is injected at once afterward through the same needle. Even after an arsphenamin shock has developed an immediate injection of 10 c. c. of a 10 per cent solution of sodium carbonate may abort it. Kopaczewski has found that addition of 3 or 4 drops of ether to the arsenical seemed to ward off all acute arsphenamin reactions in 27 patients thus treated. In 16 other patients the same effect was realized by dissolving the arsenical in a 20 per cent solution of saccharose, but a slight chill followed in one case. In 60 other patients he injected 3 c. c. of ether subcutaneously ten minutes before the arsenical or 5 c. c. of camphorated oil half an hour before it. In 4 of this group there was a slight acute reac-

tion. (L. Cheinisse, *Presse Médicale*, Paris, June 25, 1921; *Journal A. M. A.*, August 13, 1921.)

**To Ward off Reaction to Arsphenamin, etc.** Sicard and his co-workers have been making a special study of means to ward off the shock reaction from anaphylaxis or digestion hemolysis. They found that one of the most reliable is a preliminary intravenous injection of sodium carbonate before the injection of horse serum or an arsenical. Another even more reliable means is to limit the shock reaction to one limb by applying a constricting band to the root of the limb in which the anti serum or arsenical is injected. The hemolysis occurs, but it is restricted to this limb, and is less harmful, while it protects the rest of the organism against further shock when the tourniquet is slowly removed five or six minutes afterwards. In two patients presenting constantly a severe nitritoid crisis after every injection of neo-arsphenamin this simple measure tided the patients past this danger point, and the course of treatment could be continued without further apprehension. (Sicard, Paraf and Forstier, *Bulletins de la Société médicale des Hopitaux*, Paris, May 27, 1921; *Journal, A.M.A.*, July 23, 1921.)

**Stomatitis and Aplastic Anemia due to Neoarsphenamin.** Moore and Keidel present complete history of a patient who developed a fatal aplastic anemia after neoarsphenamin. The literature reveals only three reports of similar cases, aside from those already reported from this clinic. (Syphilis Department of the Medical Clinic, Johns Hopkins Hospital). Authors believe that reactions of this type are by no means so rare as the few reports in the literature would indicate. While authors have nothing to offer regarding the treatment of these reactions, a means for their early recognition on the basis of the blood picture

represents a definite step toward the prevention of the more severe forms. Damage to the bone marrow, as indicated by changes in the blood picture, is also present in the majority of patients reacting to arsenical drugs, with a rash of the exfoliative dermatitis groups, and these blood changes differ only in degree from the maximally severe reaction, as seen in this case.

In a previous paper stress was laid on the recognition of the prodromal symptoms of reactions of this group. Further observation and a study of the blood have revealed a slight decrease in neutrophile cells, eosinophilia from 5 to 8 per cent, a slight increase in the large mononuclear transitional group and the presence of numerous fragile leukocytes. The necessity for caution in further treatment was thus strongly emphasized. (Joseph Earle Moore and Albert Keidel, *Archives of Dermatology and Syphilology*, August, 1921.)

**Recurrence in Infantile Gonorrhea.** Valentin relates her experiences in the treatment of 161 cases of infantile gonorrhea. Cause for recurrence she finds in the fact that gonococci in the glands or neighboring organs were not easily accessible to the treatment. In 61 of the children in whom recurrences occurred, gonococci were found to persist in the rectum. (I. E. Valentin, *Deutsche medizinische Wochenschrift*, Berlin, June 2, 1921; *Journal A.M.A.*, July 30, 1921.)

**Effect of Antivenereal Phophylactics.** Schumacher discusses the relative efficiency of various solutions and ointments. He finds in general that the former are more effective. Warns against danger of stricture from the use of phophylactics. (Schumacher *Deutsche medizinische Wochenschrift*, Berlin, June 2, 1921; *Journal A.M.A.*, July 30, 1921.)

#### IV. SPECIAL MEDICAL NOTES

**Syphilis and Tuberculosis.** Hollander and Narr report case in which the patient showed gross syphilitic and tuberculous lesions. Authors review the available statistics of the coexistence of syphilis and tuberculosis and analyze reports of cases of tuberculous patients in whom the blood Wassermann test was performed. Of the 6,324 cases examined 494 or 10.36 per cent were found definitely syphilitic. On account of the lack of differentiation of strength of the blood, Wassermann reaction there were some cases classed as probably syphilitic. Combining the probably syphilitic with the positive 830 gave a positive reaction of any strength, this makes the incidence of syphilis in all cases investigated 17.81 per cent. (Lester Hollander and Frederick C. Narr, *Archives of Dermatology and Syphilology*, August, 1921.)

**The Syphilitic Factor in Essential Epilepsy.** Novick makes study for the purpose of determining whether syphilis is a factor in a considerable number of epileptic cases, as evidenced by history of infection, clinical manifestations, and corroborative proof of the Wassermann tests, and also the frequency of a positive Wassermann alone in the blood serum of epileptics in the absence of clinical manifestations of syphilis.

The diagnosis of the cases under consideration has been established by constant and careful observation in U. S. P. H. S. Hospital No. 34. The clinical observations of the cases were in no way influenced by the laboratory. The incidence of frank syphilis associated with epilepsy in a series of 231 cases was found to be about 2.2 per cent. The occurrence of a syphilitic factor as evidenced by repeated positive Wassermann tests alone, in the absence of clinical support, was



found in 2 per cent of the cases. (N. Novick, Public Health Reports, August 26, 1921.)

**Syphilis as Etiologic Factor in Epilepsy.** Bambaren draws the balance sheet of the conception of syphilis inherited or acquired, as a factor in epilepsy, citing testimony for and against it, including a number of articles in *The Journal*, and Levy Bing's thirteen cases of essential syphilis with an unmistakable history of epilepsy in all, and remarkable improvement under treatment for syphilis. He remarks in conclusion "How difficult it is for new ideas to gain a foothold," as his comment on Strumpell's denial that inherited syphilis has ever been conclusively demonstrated as a factor in essential epilepsy. (C. A. Bambaren, *Siglo, Medico*, Madrid, May 21, 1921; *Journal A.M.A.*, August 6, 1921.)

**A Case of Syphilis Innocently Acquired with a Primary Lesion on the Palm of Left Hand.** Patient a pharmacist's mate, assigned to duty in the venereal ward in one of the base hospitals. While cleaning glass slides which had smears from cases of chancres, one broke and penetrated palm of the left hand. The wound was cauterized with phenol. Later a lesion developed, which was trimmed with safety razor and cauterized with silver nitrate. Lesion disappeared in about two weeks. Two weeks later, a small macular rash appeared on the chest. Wassermann test at this time reported positive. Since then patient has been receiving antisyphilitic treatment, and no physical signs of syphilis have appeared. Two blood Wassermann tests taken since show 4 plus. (J. W. Jones, *United States Naval Medical Bulletin*, July, 1921.)

**Recent Progress in Anatomy, Physiology, and Pathology of Childhood.** Holmes reviews the literature—of syphilis he summarizes:

The subject of prenatal syphilis is considered by Kolmer (Kolmer, J. A., *Prenatal Syphilis*, with a plea for its Study and Prevention, *Am. J. Dis. Child.* 19:344 (May) 1920.) He cites Vedder's estimate that from 10 to 28 per cent of men from class of unskilled labor and the trades, varying in age from 18 to 40 years, are syphilitic, as well as 10 per cent of men of better education. He also states that among presumably healthy young women the percentage of syphilitic infections fluctuates between 2 and 20 per cent, depending on age, marital condition, education and social status. The incidence in negroes is estimated to be at least double the figure for whites.

Probably one miscarriage out of every ten involves a syphilitic individual. According to Jeans, (Jeans, P. C.: *Cerebral Involvement in Hereditary Syphilis*, *Am. J. Dis. Child.* 18:173 (Sept.) 1919.) at least 75 per cent of the offspring of syphilitic families are infected. Thirty per cent of the pregnancies terminate in death at or before term. Moreover, among syphilitic children the death rate is given about double the normal, i. e., 30 per cent. It is estimated that only about 17 per cent of all pregnancies in syphilitic families result in living nonsyphilitic children that survive the period of infancy.

It is found that from 2 to 6 per cent of hospital and dispensary children give a positive Wassermann reaction, with higher percentages among backward, mentally deficient and sick children. Kolmer says it would seem safe to assume 5 per cent of syphilis in the infant population, so far as detectable.

Cerebral involvement in hereditary syphilis was considered by Jeans a year ago. (James B. Holmes, *American Journal of Diseases of Children*, July, 1921.)

**Fate of Children with Congenital Syphilis.** Husten emphasizes the necessity for enforcing compulsory treatment of children with congenital syphilis. In his experience at Freiburg with thirty-nine cases in the five years ending 1918, half the children soon died from intercurrent disease, and only sixteen are known to be living now. A third died of those given partial treatment, but only one of those given thorough courses. Of the fourteen still living and re-examined personally, 50 per cent are imbeciles or idiots. He endorses the bill now pending in the German legislature, which makes notification compulsory for all children born with congenital syphilis, and also makes treatment of venereal diseases compulsory and gratis. (C. Husten, *Archiv für Kinderheilkunde*, Stuttgart, May 21, 1921; *Journal A.M.A.*, July 23, 1921.)

**Syphilis in the Third and Fourth Generation.** J. Audrain publishes in the *Bulletin of the French Société de Dermatologie*, Feb. 10, 1921, p. 85, the tabulated details of 30 families through three or four generations from a progenitor with unsuspected syphilis. Comparing the different families and generations confirms the law of persistent localization of the lesions and their periodicity, and the rarity of pain in them; also a peculiar moral and physical energy, a functional excitation which may be felt in all the organic systems and even in the exaggeration of the appetite and of the "ego." (*Journal A.M.A.*, August 20, 1921.)

**Pernicious Anemia.** Levine and Ladd find that of 141 cases of pernicious anemia only six were positive when tested by the Wassermann reaction. The average incidence of a positive Wassermann reaction in all medical admissions to this hospital (Johns Hopkins Hospital) is about 12 per cent—making the incidence among

these cases one-third of the average. Antisyphilitic treatment has had no effect upon the course of the disease. The conclusion is warranted that in these cases, syphilis has borne very little relation to the development of pernicious anemia. (Samuel A. Levine and William S. Ladd, *Bulletin of the Johns Hopkins Hospital*, August, 1921.)

**Case of Heart-Block due to Gumma.** A Wassermann test proved very strongly positive. Finally "a provisional diagnosis of gumma of the heart . . . was arrived at and the patient put upon iodide and inunctions of mercury but without benefit. The signs of cardiac failure increased, fluid accumulated at the lung bases, the liver and spleen became enlarged, breathlessness increased, cough became troublesome, accompanied by blood-stained frothy sputum.

The blood pressure fell to 97 systolic 44 diastolic. The pulse rate varied between 24 and 32. The patient complained of great weariness and thirst and death occurred 18 days from the sudden onset of symptoms."

Post-mortem confirmed the diagnosis although the actual presence of the *treponema pallidum* was not demonstrated. (R. L. Girdwood, *Medical Journal of South Africa*, May 1921.)

**Old Syphilitic Myocarditis.** Lenoble states that in this condition specific treatment is futile and may do harm. The onset of disturbance is abrupt and violent, and the periods of improvement brief. There may be a general weakness, which seems to be an essential characteristic of neglected syphilis. There is dyspnea on exertion and sometimes intense cyanosis of face and extremities. The attacks recur frequently, and there may be precordial pains of the angina pectoris type. Death occurred suddenly in one of his nine cases of the kind. (E. Lenoble, *Bulletin de l'Acad-*

émie de Médecine, Paris, June 14, 1921; Journal A. M. A., August 6, 1921.)

**Weight During Treatment for Syphilis.** Almkvist records the weight twice a week in all syphilitics taking treatment. This shows that the weight generally declines under mercurial treatment and increases under arsphenamine. . . . It seems wise to counteract the decline in weight with extra nourishing food and means to stimulate the appetite, reducing the dose of mercury if other measures are not effectual. (J. Almkvist, Hygiea, Stockholm, June 16, 1921; Journal A. M. A., July 30, 1921.)

**Venereal Disease in the Eighteenth Century.** Description of a book entitled: "A Treatise on the Venereal Disease," by N. D. Falck, Surgeon, London. Printed in 1772. Dickenson gives various entertaining extracts and concludes that the treatment for gonorrhea has made no material advance in the last 150 years. Finds also that Dr. Falck actually recommended an "antacid injection" and mercurial ointment as preventatives, "from which it appears that Metchinkoff's discovery was not exactly original." (G. O. M. Dickenson, Journal of the Royal Naval Medical Service, London, July, 1921.)

#### V. ADMINISTRATIVE AND PUBLIC HEALTH NOTES

**Industrial Application of Army and Nav Venereal Disease Records:** Everett and Clark make the statement that "Venereal diseases are a much greater handicap in industry than existing industrial statistics indicate. This inference may be properly drawn from the 1920 reports of absences from duty in Army and Navy. In the former more than 13 per cent and in the latter 15 per cent of all absences were from venereal diseases." The report of the Army shows a loss from duty of 871-

533 days in 1919 because of these diseases. The average daily absence was 7.78 men per 1,000. In the entire Navy during the same year 558,421 sick days were attributed to the venereal diseases, accounting for a daily average of 1,533 individuals absent from duty. Venereal diseases rank second in both services as causes for absence.

Few industrial plants maintain records of specific causes of disability among employees. Few if any of the usual aids toward accurate adjudgment and computation are present in the majority of cases of venereally infected workers in industry. In one company employing 18,000 persons whose records are considered among the best, the venereal diseases accounted for less than one-half of one per cent of all sickness reported during the year.

Army and Navy statistics are of interest and value in this regard because adequate reports are available of health conditions in these two large groups of men. Because of compulsory examination and because infected individuals are required to take treatment, there is, in all probability, more immediate absence from duty than would occur in an industrial group where treatment is voluntary. On the other hand chronic gonorrheal conditions and latent syphilis are more liable to occur in industrial workers, and the resulting losses in time, money and suffering are inestimable. (Ray H. Everett and Mary Augusta Clark, American Journal of Public Health, September, 1921.)

**Some Influences of the World War on the Future of National Health.** President's address, Association of Military Surgeons, 1921.

Dr. Kerr, speaking of venereal diseases, said: "With a view to ascertaining whether increase was manifest

among arriving aliens since the war, intensive examinations were made of representative groups of steerage passengers arriving at the Port of New York. Among 29,440 examined from February 13, 1921, to May 15, 1921, inclusive, a total of 124 were found to have gonorrhea, chancroid, or syphilis in active form, as verified by laboratory tests, a total of 0.42 per cent. A like intensive examination of 11,794 steerage passengers during the fiscal year 1915 had shown 0.31 per cent of venereal infection.

It should be borne in mind, however, that steerage passengers generally come from the peasant classes whose marital and social customs militate against infection. Furthermore, the conditions under which their travel is performed and the fact that they are subject to deportation if infected must tend to reduce the amount of infection among this class of arrivals." (John Walter Kerr, Military Surgeon, August, 1921.)

Resolution of All-American Conference, (International Journal of Public Health, July-August, 1921.)

All-America Conference on Venereal Diseases. Report on the Proceedings and the Resolutions of the General Conference Committee. (Charles Bolduan, Public Health Reports, July 15, 1921.)

Venereal Disease Control. Pierce gives resume of the work of the Division of Venereal Diseases, U. S. Public Health Service. The period covered is from the creation of the Division by Act of Congress in July, 1918, to the early months of 1921. (C. C. Pierce, American Journal of Syphilis, July, 1921.)

The Hospitals and Venereal Diseases. The trustees of the American Hospital Association have passed resolutions urging that "all general hospitals admit venereal-disease patients

as other patients and enter these diagnoses as other diagnoses on histories whether primary or complicating and also develop sufficient dispensary service to provide care for the ambulatory cases and the ambulatory stages of the cases treated in the hospitals." (Social Hygiene, July, 1921.)

Syphilis a Rural Problem. Highman discusses the problem of securing the proper treatment of syphilitics in rural communities. He says: "The art of treating syphilis is something that only the seasoned can master. There is no absolute routine. Each patient presents peculiar questions which lend themselves to fine appreciation only by rich experience, but the first step is simplification of method. So far as the problem is largely a rural one, this is the most important step. . . . Medical schools giving proper training, medical centers co-operating with rural districts, the simplification of technic rather than increased complexity will render this possible. (W. J. Highman, Journal A.M.A., August 20, 1921.)

Economic Status of Forty-one Paretic Patients and Their Families. Solomon and Solomon find in a normally self-supporting group of families, nearly three-fourths had less income due to the entrance of paresis, indicating a general decline in their standard of living.

At the time of commitment between one-half and three-fourths the paretic patients had declined in working capacity, although most were still employed. Almost one-half were irregular at work or changed jobs frequently, but only a few changed to less skilled labor.

Sudden cutting off of the patients' income, however, forced nearly one-half their wives to work, and two-thirds their families to receive permanent aid. (Harry C. Solomon and



Miada H. Solomon, Mental Hygiene, (July, 1921.)

**On the Ravages of Congenital Syphilis and Its Prevention.** Dr. S. Hata, Kitasato Institute for Infectious Diseases, Tokyo, gives a critical review based on statistics drawn from the cases personally examined.

Investigated the reproductive power of married women who showed a positive Wassermann reaction and who had been married for three years or more:

A. Not impregnated, about 40%.

B. Impregnated, about 60%.

The fate of the foetuses of these impregnated syphilitic mothers was:

C. Abortions, about 28%.

D. Deaths within 2 years of birth, about 42% or about 58% of living births.

E. Surviving children over 2 years old, about 30% or about 42% of living births.

Only one-third of these surviving children will live a natural course of healthy life.

The antisymphilitic treatment in vogue, as far as we know, is not radical for congenital syphilis. Best way to decrease congenital syphilis is by treatment of pregnant mothers infected with syphilis.

#### Married Women

1. Unaware of having syphilis, and who do not admit syphilis in their husbands.....21%

2. Unaware of having syphilis, but admit syphilis in husbands .....52%

3. Aware of having syphilis in both themselves and husbands .....27%

#### Unmarried Women

4. Unaware of having syphilis.....50%

5. Aware of having syphilis.....50%

Total married and unmarried women unaware of having syphilis .....(1+2+4) 62%

Total married and unmarried women aware of having syphilis .....(3+5) 38%

The early testing of the sero-diagnosis of syphilis in all pregnant women is most desirable, but even if this is considered impracticable, I should offer the following suggestions:

1. To institute a propaganda pointing out the personal and social ravages of congenital syphilis, and also the possibility of transmission of syphilis by women showing a positive Wassermann, who may be quite unaware of having syphilis.

2. To disseminate, more strenuously, information about congenital syphilis among midwives and to teach them that, if there is the least apprehension of syphilis in a pregnant woman of her husband, or if a pregnant woman has previously given birth to a premature foetus, they should advise her to undergo the blood test.

3. If a pregnant woman should show a positive Wassermann, she should be given anti-symphilitic treatment without any loss of time, should her environment permit.

4. The new-born baby of a syphilitic woman should have the blood examined and, if a positive Wassermann is found, proper antisymphilitic treatment should be given and the baby put under long continued observation.

5. If either one of a married couple should have syphilis, the other's blood should also be examined. (S. Hata, International Journal of Public Health, July-August, 1921.)

The Sixth Annual Meeting of the British National Council for Combating Venereal Disease. "In the course of his presidential address Lord Gorell said that during the past year branches of the National Council had been very active; there had been an increased number of attendance at

treatment centers, and the public was evidently realizing the importance of continuous treatment. On the home side of the work in one county alone, lectures had been delivered to more than 30,000 people. . . . On the imperial side a substantial beginning of similar work was evident, and on the international side, whatever opinions might be held concerning the general utility of the League of Nations, there could be no doubt as to the desirability for the work of the International Health Section at whose recent conference held in Genoa, the National Council had been represented." (News Note, *Lancet*, London, July 2, 1921.)

**Venereal Disease and Mental Deficiency, (in England).** "In Staffordshire, Dr. A. G. Wilkins has investigated nearly 600 cases of mental deficiency. It must not be forgotten, he urges in his annual report that the number of mental defectives is likely to increase owing to the spread of venereal disease throughout the country. This national calamity is shown by the sudden rise in infant mortality attributed to syphilis in 1917 and the greatly increased number of notifications of gonorrheal ophthalmia in 1919 as compared with 1918. Our medical staff have made some preliminary inquiries into the relation between mental deficiency and venereal disease, and find no reason to doubt the essential accuracy of Dr. Mott's statement that there is some relationship and that as much as 8 per cent of mental defectives give a positive Wassermann reaction.

"We are informed that Dr. Edith M. Guest has examined the records of 41,719 Staffordshire children of age group 12-13, and found that of a group of 44 diagnosed as syphilitic 4.5 per cent were also mentally defective, whereas of the remainder only 0.4 per cent.

Further evidence is given by Capt. A. F. Wright, Venereal Disease Officer to the Staffordshire County Council, who examined the blood of 50 mentally defective school children in Sedgley and Willenhall, and reported that 36 per cent showed traces of syphilis, half of which had been diagnosed as 'word blind', while 25 per cent were certainly syphilitic." (Editorial, *Public Health Administration, Municipal Engineering and the Sanitary Record*, London, July 28, 1921.)

**Cases of Still-Birth, (in Glasgow).** In the Glasgow health report of the years 1914-1919, Dr. A. K. Chalmers, M.O.H., includes the results of an inquiry extending from 1917 to 1920 into the causes of still-birth as shown by the examination of the foetus at the municipal laboratories. The work has been carried on under the supervision of Dr. R. M. Buchanan. . . .

The apparent age of the foetuses examined varied from 4 months to 9 months, rather more than half of the 255 examined being within a fortnight of the latter age. The proportion of cases in this series in which syphilis was undoubtedly the cause of death is certainly smaller than anticipated, for the number found was only 13 out of 255, or approximately 5 per cent. It should be noted, however, that the dark ground method of examination for *spirocheta pallida* was not employed in the first 49 examined; had it been so the percentage would probably have been somewhat higher, for in the remainder of the series the percentage works out at 6.5. It was also observed that the presence of syphilis could be demonstrated in a relatively large number of foetuses in the earlier miscarriages, so that had it been possible to obtain specimens at earlier dates than those included in the series the proportion might have been still further increased." (Notes and Com-

ments, The Medical Officer, London, July 2, 1921.)

**Still-Birth: Its Causes, Pathology and Prevention.** Browne bases his report on 200 consecutive cases of still-birth and neo-natal death occurring in the Edinburgh Royal Maternity Hospital. There were altogether 35 cases of syphilis. (Francis J. Browne, British Medical Journal, July 30, 1921.)

**Results of Census of Persons Affected with Venereal Disease, (in Germany).** A preliminary official report has been published of the results of the census of persons suffering with venereal disease, which was taken in Germany during the period from November 15 to December 14, 1919. During this period 136,000 civilians and Army men were under treatment for venereal disease or its sequels. In other words there were 22 venereal patients to 10,000 of population. In many large cities the average rate of 0.22 per cent was exceeded: Berlin 0.76; Hamburg, 0.67; and Lubeck, 0.49 per cent. However, since in the large cities there are proportionately more married men from 15 to 30 years of age (the dangerous period) than elsewhere, it is not justifiable to draw from these figures the definite conclusion that there is a greater spread of the diseases in the cities. The figures for the several states of Germany are not essentially different.

A comparison of statistics recently obtained with those based on the census of 1913 does not show that venereal diseases in Germany have materially increased. The incidence is most frequent in men and women in the 20-25 age group. The second most frequent incidence occurs in both sexes in the 25-30 age group, but after this a differentiation is noticeable, since the third most frequent incidence in men is during the period from

30 to 40; in women from 15 to 20. Of the men the unmarried group is most affected; then come the divorced, next the married group, while widowers come last. With the women the relationship is different: the divorced are most affected, then come the unmarried, next the married, and widows come last. (Berlin Correspondent, Journal A.M.A., August 27, 1921.)

**Registration of Syphilitics in Denmark.** In Denmark a system of registration has existed for about half a year. The Wassermann reaction is carried out only in one institute and under state control. The machinery for the Wassermann reaction being centralized it was comparatively easy to evolve a system of registration centering about this reaction. The Wassermann forms have been worded so as to serve the double purpose of serological report and registration. Notification is thus almost automatic; it is confidential as identification data supply the place of names.

In practice it has been found that syphilologists are apt not to make use of the test the first few years after infection. To overcome this difficulty they have been supplied with special registration forms. Although registration has existed only half a year, about 10,000 persons have already been entered on the Serum Institutes register. (O. Jersild Ugeskrift for Læger, June 2, 1921: Control of Venereal Diseases, Lancet, London, July 9, 1921.)

(Reprint from "Abstracts from Recent Medical and Public Health Papers, prepared by the Division of Venereal Diseases, U. S. Public Health Service.")



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# SOUTHERN CALIFORNIA PRACTITIONER

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## SOME PRACTICAL OBSERVATIONS REGARD- ING GLAUCOMA

J. H. McKellar, M.D., Los Angeles

I will not attempt in this short paper to cover the vast subject of glaucoma, but will endeavor to emphasize some points having to do with primary glaucoma, that have impressed themselves upon me in my studies and observations of this pathologic condition.

What is Glaucoma? An abnormal condition of the eye, in which hyper-intra-ocular tension is or has been present.

Etiology: This is a much disputed subject. Advanced age, vascular sclerosis, shallow anterior chamber, small eyeball and hypermetropia are admitted as predisposing factors.

Pathology: Depending on the stage of the disease; degeneration of the retina, cupping of the nerve head, atrophy of the nerve, obliteration of the iris angle. All of these conditions are the results of pressure.

Prognosis: Glaucoma untreated al-

ways results in impairment of the vision, both central and peripheral, and ultimately in obliteration of all vision in the affected eye.

Diagnosis: I believe there is no abnormal condition of the eye more frequently wrongly diagnosed than glaucoma. There are few Ophthalmologists who have not seen a case in the acute or inflammatory form, that has been diagnosed as iritis, and in which atropin has been used. This is, of course, a most disastrous mistake, as atropin is absolutely contra-indicated in this condition, and in fact will at times precipitate an attack in an eye predisposed.

It is at times, by no means an easy matter to differentiate between the two diseases, for in iritis or iridocyclitis, we occasionally have increased tension. The tendency to dilatation of the pupil in glaucoma, as compared with contracted pupil in iritis, the

shallow anterior chamber, the absence of posterior synechia, and the greenish appearance of the pupil should give us sufficient evidence to avoid mistakes in these cases. I have seen one case of acute glaucoma diagnosed as sea sickness, as the patient had been on the water, and was vomiting considerably.

The prodromal stages of acute glaucoma, and the insidious chronic non-inflammatory form, often require great care in making a diagnosis. In order not to overlook any case of increased tension one must have this condition in mind, at least subconsciously, in examining every case of eye disorder, especially in patients who are past early life, though even in young people we occasionally encounter the disease. It is my custom to measure the tension with my finger tips in practically every case at the first examination, and, if conditions are suspicious, at subsequent visits as well.

What are the subjective symptoms that should make us suspect early glaucoma?

1. Changes of refraction within a short period of time. These patients may complain that their glasses need to be changed every few months.

2. There may be a history of attacks of obscuration of vision. These attacks may be transient and be brought on apparently by special causes such as overeating, late hours, emotional excitement, etc., In my experience glaucoma is seldom found in any but persons of nervous temperament.

3. Halos about lights. The patient may state that in looking at a light, he at times sees a halo presenting the colors of the rainbow. This is a most significant symptom pointing to increased tension.

4. History of blindness in parents or other relatives.

5. Neuralgic pains in face and head may be significant.

Objective signs that may indicate early non-inflammatory glaucoma:

1. Small eye with hyperopic refraction, predisposes to glaucoma.

2. Distension of anterior ciliary veins. After tension has been present, these veins are much more in evidence than in the normal eye.

3. Pupil is apt to be slightly dilated, rather sluggish in its reaction.

4. Anterior chamber, shallower than usual is generally in evidence.

5. Angio-sclerosis may be associated with this condition. High blood pressure apparently bears no relation to high intra-ocular pressure.

6. Slight increase in tension. This may be very hard to demonstrate, even to one well skilled in taking tension with the fingers and with the tonometer, indeed some cases go on to excavation of the nerve head without there having been demonstrable increase of tension at any time.

Measuring the tension, both palpation by educated finger tips, and the tonometer should be used in cases when there is suspicion of increased pressure. Both are valuable but neither is infallable. The degree of rigidity of the ocular coats may be the cause of error, also, flattening of the cornea or corneal curvature will alter the registering of the tonometer. After the tension has been registered with the tonometer, changes in the tension for better or worse can be measured with great nicety at subsequent readings. In applying the tonometer, cocaine or any other local anaesthetic that dilates the pupil should not be used. Holocain 1% acts very well here.

Ophthalmoscopic examination is of little value in early stages of the disease as the cupping of the disc is not

present. Every case under the care of an ophthalmologist early should be diagnosed before cupping of the disc begins. There are exceedingly few exceptions to this rule.

It would seem that a well defined advanced case of chronic glaucoma with its contracted peripheral fields, its lowered central vision, its dilated or semidilated pupil, its cupped disc, its increased tension could scarcely be mistaken for anything else, yet I have seen these cases mistaken for cataract, optic atrophy, optic neuritis, and auto-intoxication by men who profess to be oculists. I have under my observation at present a principal of one of the Los Angeles high schools who has permanently lost the sight of one eye from glaucoma as a result of faulty diagnosis and lack of proper treatment. No correct diagnosis was made until the other eye also began to cause subjective symptoms.

Several years ago a lady of Long Beach came to me with the following history. Her vision had begun to fail so she consulted an oculist in Los Angeles. He informed her, according to her statement, that she had cataract and must wait till it had matured, and told her to present herself for operation when she was blind. This she did in the course of a year. At that time the oculist apparently became aware of the true condition for he did an indectomy in one eye. But the woman had waited too long, and she was blind to her death about two years later, her death being undoubtedly hastened by her affliction.

Now having determined that glaucoma is present what shall we do about it? Here we have a class of cases in which expectant treatment must not be applied.

1. Acute glaucoma: These cases present an urgent necessity. The patient is in pain, often agonizing, and

the sight is practically gone from the affected eye. Myotics, such as eserine, pilocarpine, etc., should be instilled at once, and repeated frequently. Absolute reliance must not be placed in these remedies, however, and in case the tension is not brought to normal within a few hours operation must be resorted to. In any case an operation will be required sooner or later.

2. In the prodromal and chronic cases we may proceed more leisurely and give the myotics a longer trial. Combined with the myotic treatment we should endeavor to correct any abnormal physical condition that may be present, try to eradicate any focus of infection that may be demonstrated, and instruct the patient in regard to leading a quiet life, with a minimum of nerve strain and eye strain. The refraction should be corrected with precision, the diet be regulated, and the bowels kept active.

Deep massage of the eyeball is a very valuable addition to the treatment and if used just before the myotic is used, acts as an accelerator of intra-ocular drainage; and, by temporarily softening the globe, facilitates the absorption of the myotic. If these measures control the tension, well and good, they may be continued indefinitely. If they do not control the tension, if the field of vision continues to narrow, if the central vision becomes more blurred, we must operate in these cases also.

What operation shall we do?

In acute cases, indectomy is the operation of choice of practically all competent ophthalmologists. It should be done in a definite manner. It should include a section of iris in its entire width, right down to the ligamentum pectinatum. The section should be made in the sclera with a broad conjunctival flap. Twenty-four hours after the indectomy it is my

custom to start massage of the eye-ball. This makes the scar less firm and allows for a time at least, and in many cases permanently, a filtrating cicatrix, with subconjunctival drainage. If properly performed this operation will cure most acute cases, and surely makes a grand stand play with the patient and his friends. In prodromal cases also the indectomy is the operation of choice.

In chronic non-inflammatory cases, opinion is divided between iridectomy and sclero-corneal trephining. The latter operation has been very popular, but late infections and other late unpleasant results are swinging the pendulum back to the iridectomy again. Personally I feel that in these cases also the iridectomy is the better operation at least in my hands. The results are generally good, in so far

as arresting the process is concerned, but success cannot be counted upon so regularly by any means as in acute or prodromal glaucoma. Other operations have been devised and more or less discarded in this disease, such as cyclodialysis, sclerotomy, extirpation of the sympathetic ganglion, etc., and when all is said and done the results of iridectomy, as devised by Von Grafe, have stood the test of time, and outshine those of all other operative procedures.

In closing I would say that treating a case of glaucoma places upon the physician a profound responsibility, and brings before him a problem toward which he should apply, or cause to be applied, the best experience and the greatest ophthalmic skill at his command.

618 Title Insurance Building.

#### TESTS OF PINE PRODUCT DISINFECTANTS

The disinfectant action, method of production, and chemical properties of pine-oil and pine-distillate product emulsions are reported in United States Department of Agriculture Bulletin No. 989, by the Bureau of Chemistry and the Insecticide and Fungicide Board, as the result of a bacteriological and chemical study of these products.

The work was undertaken for the purpose of determining the physical, chemical, and disinfectant properties of pine-oil and other pine-distillation products, in order to secure data to assist in the detection of the adulteration of commercial products as well as to check up the statements concerning the deterioration of pine-oil disinfectant and its peculiar behavior against certain pathogenic organisms.

The results reported will be of interest to bacteriologists and chemists who are concerned with testing pine-oil and pine-distillate product emulsions and disinfectants.

sions and to hospital authorities, dentists, sanitarians, and others who use these products as disinfectants. The investigators found that these products, while effective against *B. typhosus*, are not effective against *M. aureus* and *B. anthracis*, and should not, therefore, be used for general disinfecting purposes. When using pine-oil emulsions against *B. typhosus* it is safer for practical purposes, according to the report, to employ a solution five times the strength capable of killing the organism in five minutes. Thus, a product showing by the Hygienic Laboratory method a killing power of 1/500 should be used in a 1/100, or 1 per cent dilution. If the product will not give a dilution of such a concentration and remain completely emulsified, it should not be used as a disinfectant.

Copies of Bulletin No. 989, giving data upon which conclusions are based, may be had upon application to the Division of Publications, Department



## REPORT OF A CASE OF HEMORRHAGE OF THE LUNG, WITH X-RAY, AUTOPSY FINDINGS AND SPECIMEN\*

By A. L. BRAMKAMP, M.D.,  
Banning Sanatorium, Banning, California

Patient, A. J. B., admitted to Banning Sanatorium, 11:30 a. m. July 4, 1921. Referred to us by Dr. Chas. Warner, of Los Angeles, with a history of recurring and increasing pulmonary hemorrhages. Age 50. Railroad clerk, by occupation, with light, mostly outside duties. Married. Family history: not relevant.

Personal History: Typhoid when a boy; malaria; pleurisy 20 years ago. Syphilis 18 years ago, just previous to marriage, for which he had received but little treatment. Wife had two miscarriages, then a living child, now 12 years old and apparently healthy, according to statement of parents. Patient always had good health until an attack of influenza in 1919 which, he considers, marked the beginning of his present illness, as he has not been really well since, though he had a light attack and continued at work. He didn't lose weight then nor since but has tired readily. Night sweats some months ago; thinks he had no fever. No pain but a "tight feeling" in upper, left chest, at times. Slight dyspnoea on exertion. Three months ago he developed a cough that has persisted. Sputum is small in amount, yellow in the morning, at times. Had slight hemoptysis two weeks ago; considerable hemorrhage June 30th, again on July 2nd and the morning of July 4th, the last being the largest.

The patient was brought from Los Angeles in an ambulance and appeared none the worse for the 90-mile trip. On arrival he was immediately transferred to bed and only such examina-

tion made at the time, and later, as was possible without disturbing him much. Examination: Patient well nourished, pale, rather old looking man for his years (50). Temperature normal. Pulse about 100, soft. Arteries not hardened, radial pulse equal. General examination revealed nothing relevant. Right chest, no abnormality. Left chest, well marked diminished expansion over the whole left side. Dullness over the same area, somewhat less marked above.

No retraction and no discoverable atrophy or spasm of muscles, nor atrophy of subcutaneous tissues. Breath sounds were very faint over the whole left side. Subcrepitant rales were present in third and fourth interspaces. Whispered voice was slightly audible in the same area. In the second interspace, just to the left of the sternum, could be seen and felt slight pulsation; there was a faint systolic murmur in the same area but no thrill. The heart seems enlarged downward and to the left as the P. M. I. was 2 c.m. to the left and below the nipple. There seemed to be no increase of heart dullness to the right. The left border was not definable because of dullness over the whole side. There was a soft but distinct mitral systolic murmur, and a similar murmur in the aortic area. The second aortic and pulmonary sounds were somewhat accentuated. Urine was negative. No tubercle bacilli were found in the sputum in the one examination made. The X-Ray

\*Read before the Southern California Medical Society

report was received a couple of days after the arrival of the patient and was as follows: "Thickening of pleural membrane producing cloudiness of left side. Right peri-bronchial glands are thickened." During the four days this patient was with us the following observations were made: He was comfortable for the most part, though sometimes disturbed by cough. The amount of sputum was small and, usually, clear mucous. The temperature varied from normal to slightly above. Pulse 80 to 120. On the night of July 6, two days after admission, occurred a rather severe hemorrhage, the amount being about 12 ounces. After this hemorrhage and that of July 4 the sputum cleared up rather promptly. At 2:30 a. m. July 8th, the patient had a hemorrhage of about 32 ounces, from which he died in a few minutes. The blood was bright red.

Discussion. This case is a type of a large class of cases in which hemoptysis occurs and demands explanation. There was history of influenza never fully recovered from; debility; cough and expectoration; dyspnoea; later, slight repeated hemorrhages and, finally, fatal bleeding. Physical examination of the lungs showed one-sided consolidation changed breath sounds and rales. The rule is to consider every case of hemoptysis to be one of tuberculosis till proved otherwise; this because of its frequency. It is to be remembered, however, that other causes of pulmonary hemorrhage are not rare. Thus Cabot, quoted by Fishberg, in 3444 cases of hemoptysis found 50 per cent only to be tuberculous. Other authors have had similar experience. Usually lack of definite evidence of tuberculosis, particularly failure to find tubercle bacilli after repeated, thorough search, together with findings pointing to some other adequate causal condition, make it easy, or at

least possible, to rule out tuberculosis, if not to make the correct diagnosis. However, there are occasionally cases in which pulmonary tuberculosis is so perfectly simulated that only continued observation makes a diagnosis possible. These cases are not infrequently found in Sanatoria for the tuberculous. This is true particularly of cardio-vascular cases and it is in this class of cases that mistakes are most often made. The difficulties in diagnosis are increased in copious hemorrhage because it is not feasible to examine the patient carefully. In the case here reported the history of syphilis, the heart condition, the character of the sputum and the prompt disappearance of color, the failure to find tubercle bacilli, together with the general impression the patient made led us to diagnose cardio-vascular disease, and the final profuse hemorrhage as due to ruptured aneurysm. We were fortunate enough to secure permission to examine, post mortem, the thoracic cavity. The right lung was somewhat emphysematous, slightly overlapping the heart. It was light colored except for a slight amount of hypostatic congestion posteriorly. The left lung was shrunken, dark blue, not crepitant but solid almost like liver. On section the parenchyma and bronchi were found filled with blood. There were several ounces of clear, yellowish fluid in the left pleural cavity, and 2 or 3 ounces of similar fluid in the pericardial cavity. The heart was somewhat enlarged from hypertrophy of the left ventricle. The right auricle was shrunken. The valves were intact. The heart and lungs with a portion of the aorta were removed together and furnished this interesting specimen. The arch of the aorta is involved in an aneurysm, about two inches in diameter and three inches long, extending into the

descending portion. The wall of the aorta is much thickened, and roughened by numerous plaques. On the lower and inner aspect of the arch is a sacule the size of an almond, adherent to the left bronchus just below the bifurcation and communicating with it by a ragged opening  $1\frac{1}{2} \times 1\frac{1}{2}$  c. m. in diameter.

When partial rupture occurred, probably on the occasion of the second hemorrhage on July 2nd, there was some suffusion of the lung and bronchi with blood, which accounts for the physical signs and the clouding in the X-Ray, and suffusion and

clouding were increased by subsequent floodings. Probably there was also partial atelectasis of the lung from pressure of the aneurym on the left bronchus.

It is very remarkable that an individual should continue to exist so long with such a lesion as was found. However, it is well known that, in these cases of aneurysm, streaky sputum and repeated small hemorrhages before the final fatal one are not unusual.

A. L. BRAMKAMP, M. D.,  
Banning, Cal.

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## EDITORIAL

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### STATUS OF THE X-RAY

Are you doing full justice to yourself and your patients in your use of the X-ray? This question must be frequently considered by everyone in active practice, for the scope and usefulness of the X-ray is continuously increasing. Did it ever occur to you how difficult it is to really keep abreast of the times, especially regarding the advances in other specialties than our own? And in our own practice, what a tendency there is to revert to the teachings of our medical school days! Could you off-hand give a list of modern medical text-books, and not include any of those of your student days?

Now to our subject.

Roentgen accidentally discovered the X-ray, Snook designed the transformer that gives us an abundance of high-tension current for the production of the X-ray, and Coolidge devised the tube that gives an even output of the X-ray that may be regulated at will. With these elements we have become accustomed to securing excellent clear radiographs of the

extremities and lighter parts of the skeleton. With the recent introduction of the Potter-Bucky diaphragm, which largely eliminates the fogging of plates and films due to secondary radiations, similar satisfactory clear radiographs are being secured of the heavier parts of the skeleton. The next important advance will probably be the better radiography of the soft tissues.

In therapy, the greatest recent advance is the use of higher voltage and more ample filtration. In Germany, this technic has supplanted surgery in the treatment of cancers, both superficial and deep, as the method of choice. The writer has been trying it out on a series of cases since last August, and finds the immediate results better than we secured in similar cases with the nine-inch spark, formerly used in deep therapy. It is too early to tell the ultimate results in these cases, but the German reports would encourage us to be optimistic.

The results reported are astoundingly favorable; for instance, in Freiburg no cancer of the uterus has

been operated on since Jan. 1, 1919. In a private communication, Opitz presented his figures of sixty-three cases of cancer of the uterus since that date, forty-one cases of cancer of the cervix, and twenty-one of the body of the uterus. Of the forty-one cervix cases, twenty-two had receded, ten were not influenced, and nine patients died. Of his twenty-one cases of cancer of the body of the uterus, seventeen, or 80 per cent., receded, two were not influenced, and two patients died.

Wintz of Erlangen reported that he had radiated about 3,000 cases of cancer of the uterus in the last seven years. In about 70 per cent. of the cases of cancer of the body of the uterus, the disease was arrested over a period of four years, and in the cervix cases, 45 per cent. of the patients were alive after four years. Whenever there is axillary glandular involvement they prefer roentgenotherapy rather than the knife. These figures are perfectly astounding, but will be better understood when it is taken into consideration that in 1919, 7,000 radiation doses were administered in this clinic, in a small town of 27,000 inhabitants.

This brings us to another interesting phase of radiation, bearing especially on cancer of the breast. Throughout virtually all Europe, notably in England, it is the rule to administer a preoperative roentgen-ray dose to the operative field. It has been shown experimentally that radiated cancer cells do not grow on transplantation. This has been taken advantage of by the surgeon, reducing to a minimum the risk of transplanting cancer cells during the surgical removal of carcinoma of the breast. Of course, this also applies to cancer situated elsewhere.

Carcinoma of the prostrate is treat-

ed like a carcinoma of the uterus; the same method of raying is adopted. It is asserted that the results are equal to those in cancer of the uterus. As a general rule, sarcomas are favorably influenced by roentgentherapy, especially lymphosarcoma in the early stage. Cases of osteosarcoma in the young responded to intelligent radiation, provided no general sarcomatosis was present. Osteomyelitis sinuses and fistula, and tuberculous joints are treated with the same technic, with gratifying results. Multiple bone fistulas of several years' duration are completely healed.

According to Seitz and Wintz, and other observers, 85 per cent. of fibroids either shrink or disappear entirely, and in virtually all cases castration results. Moreover, they assert, malignant degeneration of fibroids offers no contraindication to radiation, since radiation here is just as applicable as to any other cancer of the uterus.

American dentists, leaders of the world in their specialty, make free use of the X-ray. They were apparently driven to its use, for it revealed so many errors in filling. Then came the search for focal infections and the recognition of the importance of the teeth and gums in this regard. The Ophthalmologists were early to recognize and make use of the X-ray, especially in the localization of foreign bodies in the eye. The Sweet eye localizer, especially the recent model, has put this form of localization on a rational basis. The surgeons use the X-ray freely in cases of known or suspected fracture, for the stimulation of granulation and healing of ulcers and wounds, in the after-treatment of operation on malignant cases, and both before and after operations on the thyroid. The X-ray is a well-recognized aid to diagnosis in ortho-



pedics and genito-urinary surgery. The more advanced of the Pediatricists are using the X-ray freely in diagnosis. The Obstetricians are tardy in this regard. With the present perfection of X-ray technic, no obstetric examination is complete without the use of the X-ray. As a rule its use is more important in obstetrics than in surgery. The so-called Internists are coming more and more to the rational use of the X-ray in their specialty. The heart, lungs and mediastinum are subjected to X-ray scrutiny; gastrointestinal diagnostics is an important part of the work of the Roentgenologist. Kidney stones and gallstones show on the films in from 85 to 92 per cent. of cases.

The use of the X-ray for the reduction of hypertrophies of glandular structures, especially of the tonsils and prostate, is being favorably resounded by competent observers. Care cases suitable for such treatment. The X-ray treatment of so-called simple goitre, is more satisfactory than is generally recognized. Contrary to a rather widespread impression, accessory thyroids often respond very well to treatment. Metabolism readings should be correctly interpreted, when the thyroid is treated with the X-ray. Often radiation is followed by disturbance of metabolism that would be alarming if such treatment had not been given, but that must be regarded as the normal reaction to a stimulant dose of the rays. Continued treatment of such cases is satisfactory.

In Dermatology, the X-ray has a wide field of usefulness. Attention is particularly directed to the granulomata, in which the X-ray is the supreme non-surgical therapeutic agent.

Now a word as to the greatest of all specialists, the General Practitioner.

The physician in general practice will find it distinctly to his advantage, as well as to the advantage of his patients, if he will keep the X-ray records of his patients as complete as possible. There is nothing will add more to his value to his patients and their just esteem for him than the knowledge thus placed at his command.

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The National Health Exposition, occupying 60,000 square feet of floor space, will be held in the Jefferson County Armory at Louisville, February 1-9, 1922. This is under the auspices of the United States Public Health Service, State Board of Health of Kentucky, Jefferson County Board of Health and the Health Department of the City of Louisville. It will include exhibits in hospitalization, nursing, dentistry, medicine and pharmacy. The University of Louisville, the public school system, and various local, state and national health organizations will participate.

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**CHEMICAL REACTIONS AND THEIR EQUATIONS.** By Ingo W. D. Hackh, Ph.C., A. B., Professor of Biochemistry, College of Physicians and Surgeons of San Francisco. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut St. Price \$1.75 net.

The inability to balance a chemical equation is a common difficulty of students of chemistry. The writer when teaching at a large university actually encountered graduate students of chemistry who were unable to balance an incomplete ionic equation that involved oxidation and reduction, not to mention the large number of first and second year students who had only a very hazy idea of the principles. In order to supply students with necessary material and to expound the general principles of balancing equations, this concise volume was written.

# INDEX TO VOL. XXXVI

## TITLES OF ORIGINAL ARTICLES

	Page
Appendicitis in Children, by Dr. Gustav Biorkman.....	11
Autobiography of Dr. Norman Bridge, by Dr. Walter Lindley.....	1
Cardiac Irregularities, by Dr. E. Avery Newton.....	167
Coast and Desert Cloudiness in Calif., by Dr. Ford Carpenter.....	75
Dedication Calif. Lutheran Hospital, by Rev. J. Lincoln.....	15
Diallylbarbituric Acid and Ethyl Morphine in Obstetrics, by Lyle G. McNeile, M. D.....	131
Duodenal Tube, by Dr. Robert Pollock, San Diego.....	133
Funeral today for Pioneer Physician.....	77
Gastro-intestinal Diagnosis, by Dr. G. E. Malsbary.....	87
Medicine's Part Reconstruction, by Dr. Rexwald Brown, Santa Barbara, Calif.....	45
Mercurochrome in Vaginal Discharges, by Dr. Titian Coffey.....	115
Modern X-ray Treatment, by Dr. G. E. Malsbary.....	69
Nitrous Oxide Oxygen, Analgesia and Anesthesia in Obstetrics, by Dr. R. F. Hastreiter .....	17
Physiological effects of Nitrous Oxid, by Dr. Niel C. Trew.....	59
Present Status of Plague infection in Calif., by Dr. W. T. Harrison, Assistant Surgeon, U. S. P. H. S. ....	53
Psychopathis Study of Poe, by Dr. Walter Lindley.....	143
Radium Results, Dr. Rex Duncan.....	122
Ships That Never Reached the Harbor, by Dr. Walter Lindley.....	35
Simplified Infant Feeding, by Dr. A. J. Scott, Jr.....	3
Uterine Fibroids in Pregnancy, by Dr. Aime P. Heineck, Chicago.....	151

## EDITORIALS

American Medical Editors' Association.....	123
Cancer .....	171
Dr. A. J. Scott, Sr., Dead.....	150
Dr. Ferbert as Director.....	11
Dr. Widney at Eighty.....	21
Los Angeles County Medical Anniversary.....	20
Promise Yourself During 1921.....	10
State Board of Health in Los Angeles.....	63
State Society at San Diego.....	51
Standardization of Speech Correction Methods.....	147
The California Lutheran Hospital.....	19
The So. Calif. Medical Society.....	19
The University of So. Calif.....	79
Trained Nurses and Scabs.....	21
Typhoid Fever .....	139

## GENERAL INDEX

American Medical Editors' Association.....	123
Anesthesia Control .....	5
Appendicitis in Children, by Gustav Biorkman, M. D.....	41
Autobiography of Dr. Norman Bridge, by Dr. Walter Lindley.....	1
California Lutheran Hospital .....	19
Cancer .....	171
Cardiac Irregularities, by E. Avery Newton, M.D., F.A.C. P.....	167
Coast and Desert Cloudiness in California, by Dr. Ford A. Carpenter.....	75
Dedication California Lutheran Hospital, by Rev. J. Lincoln, D.D.....	15
Diallylbarbituric Acid & Ethyl Morphine in Obstetrics, by Dr. Lyle G. McNeile.....	131
Duodenal Tube of Value, by Dr. Robert Pollock, San Diego.....	133
Dr. A. J. Scott, Sr., Dead.....	150

GENERAL INDEX

Page

Dr. Ferbert as Director.....	11
Dr. Widney at Eighty.....	21
Funeral today for Pioneer Physician.....	77
Gastro-Intestinal Diagnosis, by Dr. G. E. Malsbary.....	87
Japanese Camphor Allotment for the 4th Quarter of 1920.....	14
L. A. County Medical Anniversary.....	20
Medicine's Part Reconstruction, by Dr. R. Brown, Santa Barbara.....	45
Mercurochrome in Vaginal Discharges, by Dr. Titian Coffey.....	115
Modern X-ray Treatment, by Dr. G. E. Malsbary.....	69
Nitrous Oxide Oxygen, Analgesia and Anesthesia in Obstetrics, by Dr. R. F. Hastreiter.....	17
Physiological effects of Nitrous Oxid, by N. C. Trew, M.D.....	59
Plague Infection in Calif., by W. T. Harrison, Assistant Surgeon, U.S.P.H.S.....	53
Promise Yourself During 1921.....	10
Psychopathic Study of Poe, by Dr. Walter Lindley.....	143
Radium Results, by Dr. R. X. Duncan.....	122
Save Money on Meat.....	29
Ships That Never Reached the Harbor, by Dr. Walter Lindley.....	35
Simplified Infant Feeding, by Dr. A. J. Scott, Jr.....	3
Southern California Medical Society.....	19
Standardization of Speech Correction Methods.....	147
State Board of Health in Los Angeles.....	63
State Society at San Diego.....	51
Trained Nurses and Scabs.....	21
Typhoid Fever.....	139
University of Southern California.....	79
Uterine Fibroids in Pregnancy, by A. P. Heineck, Chicago.....	151

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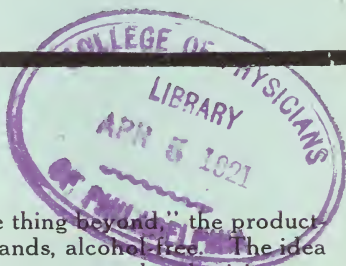
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The heavy X-ray installation was moved from the X-ray Department of the California Lutheran Hospital to the Ninth Floor of the new Pacific Mutual Building, August first. It will be maintained as a first-class X-ray laboratory by George E. Malsbary, M.D., who has been in charge of the X-ray Department of the California Hospital during the past five years, and is still in charge of the X-ray work in that institution, recently rechristened the California Lutheran Hospital.

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Improves the appetite  
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Restores functional activity of vital organs  
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Makes sound sleep possible  
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Gradually but surely builds up the strength  
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*It is always essential, however,  
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SEPT. 1921

No. 9

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DR. GEO. E. MALSARY, Editor

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# Tuberculosis and Wasting Diseases

When cod liver oil or fatty foods cannot be digested or assimilated, but tend to further upset an already weakened and deranged digestion, other means must be resorted to, for building up and restoring the strength of the body.

Clinical experience has shown that under these conditions

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### SOUTHERN CALIFORNIA MEDICAL SOCIETY

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Society will be held in Los Angeles on Friday and Saturday,  
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says a well-known physician, "are merely the 'cry of the nerves' for tonic treatment and better nutrition."

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5. **Imparts resisting and staying power to the nervous system,**
6. **Restores the vitality and strength of the whole body.**

Often, therefore, when all other remedies fail to control neuralgia or neuritis, Gray's Glycerine Tonic Comp. will afford prompt and permanent relief.

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